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THE HYDASPESE-BATTLE COMMEMORATIVE MEDAL OF ALEXANDER THE GREAT— A FRESH APPROACH

Deena Bandhu Pandey

The Medal under study is found in two types. The first type was found at Khullum in Bokhara by A. W. Franks and was presented to the British Museum in 1884 or 85. The medal was published and studied for the first time in 1887 by P. Gardner[1] and afterwards twice by B. V. Head.[2] A second specimen of this type is in the cabinet of the Banaras Hindu University which has been studied by T. P. Verma.[3] The second type was published by B. V. Head[4] now in the British Museum which was probably found from somewhere in Babylonia. Other scholars who have studied and re-published these medals, have mostly followed B. V. Head's interpretation.

Additional Observations

On obverse, type 1, we find a dotted border ; the reverse has no border but the round depression of the stamped portion is clearly visible. The coin in the cabinet of the Banaras Hindu University has no clear border. The medal is crude and there is no Nike on the reverse.

On obverse, type 2, the monogram is actually a combination of ꓭAB. Lances are two in number one in the hand of the elephant rider and other in the hand of the horseman. This type is somewhat cruder in appearance than type 1 of the British Museum.

1. 'New Greek Coins of Bactria and India', *Num. Chron.*, 1887, pp. 177 ff., illustration.
2. 'The Earliest Graeco-Bactrian and Graeco-Indian Coins', *Num. Chron.*, 1906, pp. 8f. pl. 1; *Historia Numorum*, London, 2nd ed., 1911, pp. 832f.
3. *A Catalogue of the Greek and the Indo-Greek Coins in the Department of Ancient Indian History, Culture and Archaeology, B. H. U.*, 1965, Unpublished. Indian Museum Calcutta also possesses one specimen) cf. *JNSI*, XII, pt. II, p. 119. f.n. 1).
4. *A Guide to the Principal Coins of the Greeks,* London, 1932, p. 49, pl. XXVII, 4.

Alexander's Depiction on the Medal ?

It is noteworthy that while describing the coins B. V. Head is inclined to see a picture or figure of Alexander on the medal.[1] While Gardner objectively identifies the figure of the reverse simply as 'a king'.[2] In type 2, Head attempts to see Alexander not only on reverse but on obverse too.[3] T. P. Verma identifies the horseman to be Āmbhi but he is doubtful about its accuracy.[4]

B. V. Head writing second time on this medal[5] quotes his own first comment and published coins but it seems that he deliberately ignored Gardner's views and plate on which it appeared for the first time, for it went against Head's own hypothesis. V. A. Smith following Head did likewise, apparently more or less for similar reasons.[6]

Gardner gives his own interpretation of the way in which an inartful practitioner of numismatics will treat to this medal after a fleeting look—"Looking for the first time at this extraordinary coin, or rather medal—for it is clearly a historical monument—every one will be tempted to exclaim "Alexander and Porus."[7] I think, in this presupposition of Gardner lies the views held by B. V. Head, Mr. Hill and V. A. Smith etc.

When and Where this Medal was Struck ?

Gardner thinks,[8] considering its findspot north of Paropanisum, art and fabric alike those of coins of Antiochi, that the medal was issued by the Greeks in Bactria, and not in India. He assigns the period of issue between 330–125 B. C. B. V. Head on the other hand, conjectures[9] the place of its issue to be Taxila which has been

1. *Historia Numorum*, p. 833.
2. Op. cit., p. 178.
3. *A Guide to the Principal Coins of the Greeks*, p. 49. following Hill (*Num. Chron.*, 1927).
4. Op. cit., p. 4.
5. *Historia Numorum*, p. 833.
6. V. A. Smith, *Early History of India*, Oxford, 4th ed. 1924, p. 76.
7. Op. cit., p. 178.
8. Loc. cit.,
9. *Historia Numorum*, p. 833. While writing for the first time on this medal (*Num. Chron.* 1906, op. cit.) he gave its photograph under the heading COINS FROM INDIA (ibid., pl. 1).

rightly rejected by Macdonald[1] on the basis of the findspot and he assigned the time for this medal to be as Alexander's own reign. This is about type 1. Type 2 was probably found in Babylon.[2] Head considering[3] its size, style, fabric, type and monogram assigns the medal to the age of Alexander himself. He sees the wrong depiction of the elephant as a fault of the Greek artist who was not familiar with the movements of the giant beast.

We are not opposed to Head's view that the medal was issued in the time of Alexander, but in our opinion, it was issued from some where in Persia, and not from Taxila. It is quite likely that Medal was issued in Babylon which was one of the mint cities of Alexander.[4]

A Study of Reverse and Obverse Types

Reverse Type

Gardner is of opinion[5] that the obverse figure is not of Alexander but of some Indo-Greek king. Head interprets[6] the standing figure to be Alexander and in the monogram he sees Alexander's name and his royal epithet *(Bacileus Alexandros ?)*.[7] Gardner and Head both are of the view that the figure wears the combination of Greek and Persian dresses, but they differ in its identification. In monogram where Head reads the name and royal epithet of Alexander the Great, Gardner suggested that it might have been an abbreviated form AB which appears on certain coins of Antiochus I.[8]

Both the scholars are mistaken in the explanation of the monogram. They have taken it as a combination of letters A and B but actually there is a second B (facing left) also[9] in both the types as

1. *Cambridge History of India,* Vol. I, Delhi, 1955. p. 349.
2. *A Guide to the Principal Coins of the Greeks,* p. 49.
3. *Num. Chron.,* 1906, p. 9, f.n.7; *Historia Numorum,* p. 833.
4. R.A.G. Carson is of opinion that the medal was issued by Seleucus from Babylonia mint (*Coins,* London, 1962, p. 82).
5. Op. cit., p. 179.
6. *Historia Numorum,* p. 833; *A Guide to the Principal Coins of the Greeks,* p. 49.
7. *Historia Numorum,* p. 833.
8. Op. cit., p. 179.
9. It is clear on the coin in the Banaras Hindu University cabinet.

already noticed by Head when he published Type 2 specimen.[1] Thus, the monogram should be taken not only as BA but as ꓱAB. Gardner has pointed out that it looks as if the die engraver has begun to make the B after the A and then abondoned this intention and made it in front instead.[2] But this plea, to take the monogram as BA, seems to be mistaken since the monogram consists of ꓱAB in both the types. So the monogram ꓱAB has its own importance and it is not possible to relate it with Alexander, or with AB of the coins of Antiochus I, except that it may be taken as an abbreviation of the mint city of Babylon.

The reverse figure is obviously that of a victor, because in the second type Nike has been shown flying to crown the standing figure, and the figure is of a Greek as it is clear from the dress and the deity depicted. The dress of the figure being Greek and Persian in combination and the art being of a Greek artist, not of later Graeco-Indian artist, it may be assumed, lending support to Head's interpretation that Alexander has been depicted on the reverse.

Obverse Type

On this side we find, according to Gardner, a life-like battle scene.[3] But Head's remark[4] in this connexion is interesting : "In the whole range of Greek numismatic art, there is so far, I am aware, no other instance of coin type designed, I think, to represent pictorially a particular contemporaneous event and more over that the details of the type correspond so closely with the account of Arrian", and he identifies Porus on the elephant and Taxiles as the horseman.

Head holds that the *turning* or *twisting round* of Porus on his elephant in order to spear his enemy as Arrian has written, is rendered to life on this remarkable medallion.[5] Head at another place,[6] identified the horse rider figure as Alexander and not as Taxiles, yet he maintains, 'This medallion commemorates Alexan-

1. *A Guide to the Principal Coins of the Greeks*, p. 49.
2. Op. cit., p. 178, f.n. 1.
3. Ibid., p. 179.
4. *Historia Numorum*, p. 833., the same view has been expressed by him in *Num. Chron.*, 1906, pp 8f.; also T.P. Verma, op. cit., pp. i and 4.
5. *Num. Chron.* 1906, pp. 8f.
6. *A Guide to the Principal Coins of the Greeks*, p. 49.

der's expedition to the Punjab and his defeat of Porus'. While identifying the horseman as Alexander, it is clear that he rejects the depiction of the event recorded by Arrian. If we take Taxiles as horseman, it may indicate that the medal was issued by Taxiles which will not be convincing because the execution is Greek, and the findspot was Persia. If we take the horseman to be Alexander, then there is no literary evidence that Alexander came so close to Porus at any time.[1] Still, if we insist on identifying elephant rider as Porus, it will be just a surmise.[2] A horseman will always attack on an elephant from behind and never from the front. Hence, there seems to be no warrant to recognise in the scene galloping Āmbhi or his brother attacking Porus.[3] The medal simply shows the attack by a horseman on elephant riders; this is clear from the second type of the medal where we see the two spears, one in the hand of the elephant rider and another probably in the hand of the horseman. Thus, it is clear that a battle scene is depicted, and it will be very unwise to connect it with Arrian's account.

Gardner takes this to be a battle scene between a Bactrian king, probably Eucratides or Helioclese and the invading hoards of the Yueh-chis.[4] However, the execution points to an earlier date.

It strikes me to be a battle of Alexander and Darius III at Gaugamela. It is well known that Darius III called in the Indian troops when he was resisting Alexander's invasion of Persia at Gaugamela. It is beyond doubt that a group of Indians[5] with elephants fought along with the Persians against Alexander. With them there were archers and cavalry. The Persian king was gaurded by there Indian soldiers.

Nonetheless the testimony of Firadausi would suggest the identification of the Indians with Pauravas, the army of Porus. Firadausi in his '*Shah Nama*' informs that Darius III after being

1. J.N. Banerjee quotes Curtius who refers Alexander pursuing Porus (Mc Crindle, *Invasion*, p. 212). However, at this time Porus was in wounded condition and probably not in a position to hurl the lance.
2. T. P. Verma has put question mark not against Āmbi only but against Porus also (op. cit., p. 4).
3. T. P. Verma describes as Āmbhi (?) on horse attacking Porus (?) on elephant. (ibid., Introduction, pp. i and 4). Actually Arrian says that, Āmbi was sent for truce, there was no question of attack.
4. Op. cit., p. 178.
5. Chinock, *Arrian's Anabasis*, pp 142–3, *Universal History*, Vol. II, *Ancient World*, Jhon Clark Ridpath, New York, first ed., p. 368.

defeated once by Alexander wrote a letter to Porus seeking help.[1] In the Greek and Syric versions, the letter to Porus is given at somewhat greater length. Darius III invites Porus to meet him with an army at the Caspian Gates, and promises him half the spoil and Alexander's horse Bucephalus[2] as reward. That the help was sent by Porus is confirmed by another statement in Firadausi. When Alexander sent messenger asking Porus to submit to him, Porus in his brave answer makes reference to his mighty army and mentions the help he had sent to Darius III in the form of elephants.[3]

Herodotus informs us that Darius III was guarded by a group of Indians who according to Arrian were with the elephants. Authorities on Iranian history are of the opinion that at Gaugamela chariots and elephants were the chief components of the army of Darius III.[4] If we analyse the accounts handed down, we will find that a considerable number of Indians formed the army of Darius III. They also acted as the body-guards of the Persian king. It shows the close alliance of Indians with the Persian king and importance of Indians at Gaugamela battle. There should be no hesitation that Gaugemala battle was perhaps guided by Indians. Thus, it was a battle guided by Indians and Darius III must have been given a safe position on the back of an elephant, which was considered as invincible in those days. Alexander, after the battle of Gaugamela conquered Babylonia. Thus, Darius III on elephant seems to have been depicted on the medal. The hero riding the elephant appears to be more Persian in look than Indian. Thus, the depiction of the battle may be related with the victory won by Alexander in Persia.

1. *Shah Nama*, ed. by T. Macan, Vol. III, p. 1279, *Shaha-Nama of Firadausi*, translated by A. G. Warner and E. Warner, Vol. VI, p. 51.
2. Cf. Buddha Prakash, *Studies in Indian History and Civilization*, Agra, 1962, p. 39, *Pseudi-Kallisthenes*, ed. by C. Muller, Vol. II, p. 19. *The History of Alexander the Great being the Syric version of Pseudo-Kallisthenes* ed. and translated by Ernest A. Wallis Budge, Vol. II, p. 11.
3. *Shah Nama*, op. cit., p. 1305, and translation op. cit. p. 112. Buddha Prakash is of opinion that the elephant corps of Porus arrived but late (op. cit., pp. 42, 44). This view is not tenable, Porus simply refers the past events, there is nothing that the help reached late and because of this Darius III failed to resist.
4. R. Ghirshman, *Iran*, Penguin Books, London, 1965, p. 212.

The depiction of reverse figure wearing a combination of Greek and Persian dress also indicates that the event recorded is related with Persia. It has been noted that Alexander was once distinguished at the battle of Granicus by this dress.[1]

If the reverse device depicting the standing figure being crowned by Nike be indicative of some real victory, the scene fits with the decided battle of Gaugamela rather than with the undecided battle of Hydaspese.[2] The dress, the provenance and the mint—all point to its definite relation with Persia.

The Purpose of the Medal

Gardner suggested[3] that the medal was issued in commemoration of barbarous Yeh-chi invaders who were put to flight for ever. Head once suggested[4] that it was intended as a presentation medal to Macedonion Oficers, rather than for use as current money. Later he suggested[5] that this piece was struck as a medal in the name of Alexander, and perhaps by Taxiles in commemoration of the episode of Hydaspese battle. But as the minting technique was not prevalent in India at that time and also as indicated by the depictions on the medal as discussed above, the views of both Gardner and Head seem unacceptable. The pieces are of medallic character but we suggest that they were struck undoubtedly by Alexander himself in commemoration of his victory at Gaugamela and not at Hydaspese.

1. *A Guide to the Principal Coins of the Greeks*, p. 49.
2. What we know from the quoted narrative of Arrian it is not to be accepted that Porus was really defeated in the battle-field. We have references in Greek writings that Alexander offered many times the term of truce in which at the last Merose succeeded in convincing Porus. After this the story runs depicting Porus and Alexander as friends. It is impossible to believe that an undecided battle was taken to be depicted on the medal and Alexander who was really not crowned by Nike in the battle-field has shown himself as being crowned by the goddess of victory (cf. D. B. Pandey *Porasa*, Varanasi, 1966).
3. Op. cit., p. 121.
4. *Num. Chron.* 1906, p. 9. T. P. Verma, op. cit., p. 4, also Introduction, p. i. puts question marks against Āmbhi and Porus which shows that he is not agreeing fully with Head's view.
5. *Historia Numorum*, p. 833.

A RELIGIOUS STUDY OF THE INDO-GREEK COINS

J. P. Singh

The first definite arrival of the Greeks in India can safely be said to be the Macedonian invasion of Alexander. He built new cities and placed garrisons there. Probably these can be said to be the first Greek settlements on the Indo-Pak sub-continent. It appears, however, that the life of these military settlements was a short lived one.[1] Those of his Satraps as remained on the sub-continent were defeated and killed in the war of liberation waged by Chandragupta. However, it seems that Chandragupta succeeded against the Greeks around c. 317 B. C. when Eudemus left India along with his army.[2]

Before marching back towards home Alexander offered sacrifices to the Greek gods and also built twelve gigantic altars to commemorate his Indo-Pak victories. According to one account, later "the Mauryan kings used to offer sacrifice in the Yavana manner upon these altars."[3] Like Alexander[4] his Satraps also must have followed their own religion while in India, but it seems that the use of Greek Altars to offer sacrifices in the Yavana manner by the Maurya kings is a mistake.

Thereafter, the Bactrian Greeks entered India and founded several small kingships in Punjab. Over thirty Indo-Greek kings are known from their coins and only a few of them are known even otherwise. Thus the main source of the history of the Indo-Greeks is their coinage. These coins contain either the figures of Greek gods and goddesses or their attributes on their reverse. A few exceptional cases, however, bear the figure of the deity on the obverse. The majority of the deities are Greek but some coins seem to contain Indian deities also.

1. *The Age of Imperial Unity*, p. 53.
2. Ibid, pp. 58-59.
3. *The Cambridge History of India*, I, p. 334.
4. The Commemorative Coins of Agathocles issued in commemoration of Alexander bear a figure of thundering Zeus on their reverse which shows that even later Alexander's belief in Greek gods and religion was known.

Among the Greek gods and goddesses that are found on the coins of the Indo-Greeks are Apollo, Artemis, Athena (Pallas), Demeter, Dioskuroi, Hecate, Helios, Heracles, Nike, Poseidon and Zeus. The city deities of Kapiśā and Pushkalāvatī may possibly be also included in this list.

1. Apollo

Certain tetradrachms of Eucratides contain the naked figure of Apollo standing holding bow and arrow.

Apollo-coins generally represent the god with tripod-lebes on their reverse. The figure of the god is usually depicted on the obverse and sometimes on the reverse (as on the coins of Eucratides II).

The figure of Apollo standing to front or to right or left with bow and arrow is found on the coins of Eucratides II, Apollodotus, Dionysius, Hippostratus, Strato I and Zoilus II.[1] Some coins of Zoilus II bearing standing Apollo along with an elephant are also known. This association of the elephant with Apollo seems to be an Indian feature. A coin of Apollodotus shows Apollo seated to r. on throne.[2]

The head of the deity is depicted on some copper coins of Eucratides II, Strato I and Euthydemus II.

Tripod-lebes, the special attribute of Apollo is depicted usually on the reverse of Apollo coins. But a few coins of Menander, Apollodotus and Zoilus II bearing tripod-lebes on the reverse contain bull-head, bull and an elephant on their obverse. These animals possibly cannot be connected with either Apollo or his tripod-lebes as they are not depicted together.

Thus in all eight Indo-Greek kings are known to have used Apollo as their type.

2. Artemis

Artemis is represented on the reverse of the silver coins of Artemidorus. On these coins she is shown standing to left and shoot-

1. There is no Apollo on the coins of Zoilus I as mentioned by A.N. Lahiri. *Corpus of Indo-Greek Coins*, p. 27.
2. *CASE*, IX. 12; cf. *Coin-types of Indo-Greek Kings*, No. 7; Lahiri, *Corpus of Indo-Greek Coins*, type No. 9 under Apollodotus II.

ing an arrow. On the copper coins of this king the deity is shown standing facing, drawing arrow from quiver at back on the obverse. Another coin shows her holding out a bow on obverse.

A coin type of Diodotus II shows Artemis running with a torch on its reverse. Some coins of Demetrius I bear a depiction of Artemis standing with bow and arrow on their reverse. The obverses of these two types contain respectively the head of Zeus and Heracles. A type of Peucolaus also shows Artemis standing and drawing arrow from quiver at back on obverse and a city goddess on its reverse.

Artemis is thus used as a type by four Indo-Greek kings.

3. *Athena* (or *Pallas*)

A silver type of Demetrius II[1] shows on its obverse Athena standing, holding spear and shield. But in later representations she is shown hurling a thunderbolt. In this particular mode she is depicted on coins of many kings after Menander, such kings include besides Menander, Polyxenus, Epander, Strato and Agathocleia, Strato I, Apollodotus, Nicias, Zoilus II, Dionysius, Apollophanes, Strato I and Strato II, and Amyntas.

On some coins of Strato I helmeted Athena is shown standing with aegis and holding Nike in her outstreched right hand. The reverse of a type of Theophilus shows helmeted Pallas seated, holding out Nike.

Some silver types of Amyntas show enthroned Zeus holding out Athena in his outstreched right hand.

The full standing figure of Athena is also found on the reverse of copper coins. Her helmeted bust, however, is depicted on the coins of Menander, Agathocleia, and Polyxenus. A copper type of Menander contains Athena on both sides of the coin. Its obverse shows bust of Athena and she is shown standing hurling thunderbolt on its reverse.[2]

1. According to A.K. Narain Bust of King and Seated Pallas, Gardner, *BMC*, XXX. 2, belongs to Seleucid Demetrius II and 'Bust of King wearing elephant scalp and standing Pallas', *IMC*, I, p. 9, No 5, is a mistake cf. his *Coin-types of the Indo-Greek Kings*, *JNSI*, XVI, II, p. 301, N.B.
2. *CASE*, XII 2; *PMC*, VI. 506.

Her sacred bird owl is depicted on the reverse of some coins of Archebius, and Menander. Her aegis is also depicted on the obverse of the coins of Antimachus II and on the reverse of Polyxenus. It appears that in all about a dozen kings have depicted Athena.

4. Demeter

A silver medallion of Amyntas shows enthroned Demeter, holding cornucopiae on the reverse. A square coin type of Philoxenus also shows Demeter standing to left holding cornucopiae on its obverse. A silver type of Hippostratus contains on its reverse a city-goddess carrying cornucopiae, an attribute of Demeter. Another copper type of Philoxenus also bears the figure of a similar deity (Demeter ?) holding cornucopiae on its obverse.[1] A coin type of Theophilus perchance bears a cornucopiae on its reverse (*PMC*, VIII. 632). The city deities may be identified with Demeter.

Four Indo-Greek kings struck coins with Demeter.

5. Dionysius

On the obverse of some of the coins of Pantaleon and Agathocles the head of Dionysius is depicted. Their reverse shows a panther, which is often connected with the god. Their copper coins bearing the 'yakshiṇī Aśvamukhi' or the 'dancing girl' on obverse also contain a panther on their reverse. This panther may be associated with Dionysius,[2] as the god has been depicted in its association on some of the coins. But the panther occurring on some copper issues of Menander and Artemidorus can only doubtfully be connected with the god.

6. Dioskuroi

Eucratides I appears to have been the first king to issue coins with the Dioskuroi. On his gold and silver coins they are shown riding on horse back, charging with spears. Diomedes has depicted them similarly on his silver issues. Their bilingual coins depict the Dioskuroi standing holding long spears and swords.[3] Some coins of

1. A. N. Lahiri, *Corpus of Indo-Greek Coins*, p. 170, No. 11.
2. Tarn, *GBI*, p. 158.
3. Dioskuroi are shown with swords only on a type of Eucratides I (*BMC*, XXX. 8; *IMC*, II. 9) and not on the coins of Diomedes. The rest of the description tallies.

Eucratides I contain a depiction of the palms and piloi of the Dioskuroi on the reverse of coins.

The mounted Dioskuroi charging are struck by these kings in copper also. A single Dioskuri mounted and charging is illustrated on some coins of Eucratides. A type of Diomedes shows the Dioskuroi standing on obverse with long spears.

Their palms and piloi are also found on the reverse of some coins of Eucratides, Antialcidas, Lysias-and-Antialcidas, and Archebius.

7. Hecate

Hecate has not been depicted alone on coins. She is depicted as a three headed deity standing on the outstreched r. hand of Zeus enthroned on the coins of Pantaleon. On the coins of Agathocles standing Zeus is shown holding her similarly.

8. Helios

Helios is known from the coins of Plato and Telephus. On a coin of Plato, Helios is seen driving a quadriga to r. with flowing draperies. On some other coins of the king the quadriga is driven to front. On yet another coin of Plato radiate Helios is shown standing to front with r. hand raised and holding a sceptre in l. hand. Some coins of Telephus show radiate Helios standing facing with a helmeted figure[1] by his side.

The standing deity is also found on the obverse of a copper piece of Philoxenus.

9. Heracles

Euthydemus I is the first king to have struck coins with Heracles. His chief attributes include club and bow and arrow. On the coins of Euthydemus I Heracles is shown seated on a rock with his club.

Demetrius I, the next king on the contrary uses a standing facing Heracles crowning himself holding club and lion's skin. Heracles crowning himself type was also used by Lysias and Theophilus. Euthydemus II's silver type shows on its reverse Heracles standing to front, holding out a wreath in r. and club and lions skin

1. Male (cf. *Coin-types of Indo-Greek Kings*, p. 33) or female (*Corpus of Indo-Greek Coins*, p. 184).

in l. hand. This type has also been used by Zoilus I. Another, a rare silver type of Zoilus I shows Heracles standing similarly but being crowned by Nike standing on his l. shoulder. A coin of Theophilus shows crowned Heracles standing holding lion's skin in l. hand and resting the r. hand on the club.

A copper coin of Agathocleia and Strato I shows Heracles with club seated on rock. The head or bust of Heracles has been used by Euthydemus I, Demetrius I, Euthydemus II, Lysias-and-Antial—cidas,[1] Lysias, Strato I, Theophilus, and Zoilus I.

10. Hermes

Hermes himself has not been depicted on any coin-type of the Indo-Greeks so far known. The bust of Hermes, however, wearing petasus is recognised on the obverse of a copper coin of Diodotus I and also though doubtfully on a copper coin of Diodotus II.[2] His characteristic symbol, the caduceus, is depicted on some copper pieces of Demetrius I and Maues, the Śaka king.

11. Nike

Nike the goddess of victory is depicted on some silver coins of Antimachus II, Artemidorus and Menander, holding wreath and palm. On the coins of Antimachus, Nike is depicted on obverse. On the coins of Antialcidas and Heliocles Nike is shown on the outstreched r. hand of Zeus. On some coins of Strato I and Theophilus, Nike is shown standing on the outstretched r. hand of Athena. On a rare type of Zoilus I she is standing on the shoulder of Heracles and crowning him. Two other types of Antialcidas depict her being carried by an elephant, walking by the side of Zeus.

On copper coins Nike usually appears in full figure on reverse except on the coins of Archebius and Epander where she appears on the obverse. The standing figure of the goddess is depicted on the reverse of the coins of Antimachus I, Eucratides I, Menander, Strato I, Philoxenus and Hermaeus. Sometimes she is shown with wings.

Her attributes palm and wreath are shown on some coins of Antimachus II. Her palm alone is illustrated on a type of Menander.

1. This type is considered to be a mule, cf. *Coin-types of the Indo-Greek Kings, JNSI*, XVI, II, p. 319.
2. A. K. Narain, *The Coin-types of the Indo-Greek Kings, JNSI*, XVI, II, pp. 297-8.

On a copper type of Antimachus I winged Nike is shown standing on the prow of a ship.[1]

12. Poseidon

Poseidon appears standing facing with trident and palm on the coins of Antimachus I's silver pieces.

His head with trident is shown on the obverse of a copper of Nicias. A copper piece of Demetrius, however, shows his trident.

13. Zeus

Zeus is represented variously on the coins of the Indo-Greeks as standing or enthroned. On the gold and silver issues of the Diodoti he is shown standing hurling thunderbolt with aegis, wreath and eagle. On some coins of Demetrius I and Heliocles I–II Zeus is shown bearded, standing wearing himation, holding a long sceptre in l. and a thunderbolt in r. hand. Coins of Archebius also show him hurling thunderbolt and some other coins of the king show him thundering holding an aegis but without his usual sceptre.

On some coins of Antialcidas Zeus with sceptre is shown walking by the side of an elephant carrying Nike. A silver type of Peucolaus shows Zeus with sceptre holding a two horned small object in his hand. Certain coins of Agathocles show Zeus with sceptre holding three headed Hecate in his r. hand.

The enthroned Zeus on the commemorative coins of Agathocles holds eagle in r. and sceptre in l. hand. Coins of Pantaleon show him enthroned with sceptre in l. and three headed Hecate in r. hand. Enthroned Zeus holds Nike at times on coins of Heliocles I. Zeus enthroned holding Nike is a common type of Antialcidas. These coins, however, also show the forepart of an elephant. On a type of this king, however, Zeus is holding wreath and palm and not Nike. This type shows a small elephant vertically represented on l. field. The association of elephant again seems to be an Indian feature accorded to Zeus and Nike in India. Zeus enthroned on the coins of Amyntas is shown holding Athena. The god on the coins of Hermaeus is always enthroned. On a type of the king, however, he is holding a pair of callipers.[2] Some coins of Telephus also bear enthroned Zeus.

1. *BMC*, p. 164, XXX. 7; Lahiri, *Corpus of Indo-Greek Coins*, p. 89.
2. E. T. Newell, *N. N. M.*, 82, p. 92; cf. also Lahiri, *Corpus of Indo-Greek Coins*, pp. 34, 139.

The bust of Zeus is found on the obverse of some coins of Diodotus II and Euthydemus I. Some copper issues of Antialcidas contain an undraped bust of Zeus hurling thunderbolt on obverse. A diademed head of Zêus with sceptre over shoulder is found on the obverse of a copper piece of Archebius.

The thunderbolt of Zeus occurs on the reverse of a copper coin of Demetrius II and Antımachus I.

14. Uncertain Deities

The reverse deities on some copper coins of Hippostratus and Peucolaus bearing Triton and Artemis respectively on obverse are usually recognised as 'city goddesses.' But 'we do not know if they were actually'[1] city deities. Similarly the enthroned deity on a square backed throne on the obverse of a copper piece of Hippostratus bearing a horse on its reverse is also unidentified.

The reverse of a copper coin of Eucratides I shows a deity seated on throne holding palm with 'the forepart of an elephant in l. field and a conical object which looks like a caitya or mountain(?)',[2] bearing *Kavisiye nagara devatā*, depicts possibly a female deity.[3] A gold coin, whose issuer is not known, bears a female figure wearing crown and holding a lotus in r. hand which is labelled as *Pukhalavadi devada*.[4] It appears, however, that the city deities of Kapiśā and Pushkalāvatī can definitely be said to have been guardian deities of the cities concerned. But not much can possibily be said about their Greek or Indian nature. Similarly uncertain is the nature of a squatting human figure found on a square copper coin of Telephus.[5] Its posture of sitting is typically Indian and the figure seems to be wearing a top knot like Indian ascetics rather than somekind of a headdress. The figure seems to be bearded and naked, an important feature of the Indian anchorites.[6]

1. Lahiri, A. N., *Corpus of Indo-Greek Coins*, p 33.
2. A.K. Narain, *Coin-types of the Indo-Greek Kings, JNSI*, XVI, II, p. 305.
3. Whitehead, R. B., *NC*, 1947, p. 30, fig. 1; Narain seems to be doubtful about its being a female, cf, *Coin-types of the Indo-Greek Kings, JNSI*, XVI, II, p. 305.
4. *CHI*, I, VI.10. Some later readings of the obverse legend suggest the reading of the word *nagara* between the two words of the legend.
5. *Corpus of Indo-Greek Coins*, p. 185; *The Coin-types of the Indo-Greek Kings*, p. 33.
6. Compare the seated anchorites represented on the gateways of Sanchi, *Monuments of Sanchi*, Pls. LII, a 2, 3; XXVII, XXIX. I am grateful for this reference to my friend Shri J. N. Tiwari.

15. Animals

The animal representations found on Indo-Greek coins include elephant, bull, camel, horse and panther (called by some as maneless lion). Besides the heads of boar, elephant, and ox are also found on some coins. Among birds only the eagle and owl are represented. Fish is represented by dolphin which occurs on some copper coins of Menander and Nicias. But it is very difficult to say that all of these animals were portrayed due to their religious importance. The eagle always is depicted in association with Zeus and the owl too can be associated with Athena on all coins possibly in one way or the other. But the same can not be said regarding other animals. The Greeks, however, once settled in India tried to associate the Indian Elephant with some of their deities.

It appears from what has already been said that the Indo-Greek kings were trying to follow their own faith and as such must have ruled according to Greek idealogy and thought in India as far as possible. The coins of the Indo-Greek rulers, their language, coin motifs, deities etc. are enough to indicate that they were trying to maintain their Greekhood as much as possible. Therefore, they must have ruled on this sub-continent in accordance with their own political and social background and tradition to the extent it was permitted by local conditions. The adoption of the regal title *soter*[1] or protector is significant from the administrative view point. But it is not known for certain whether the Greek kings using this title meant themselves specifically to be portrayed and publicized as protectors of their Greek subjects only or the local population[2] as well. Another title of the type is Dikaios or *dhramika* often taken to mean 'just'. Probably the king's using this title may have tried to impress the impartial nature of their justice.

16. Indian Deities etc.

Coins of the Indo-Greeks do not show many Indian deities. Some copper coins of Pantaleon and Agathocles, however, bear the

1. *PMC*, I, p. 18, Nos. 51-52; *The Coin-types of the Indo-Greek Kings*, *JNSI*, XVI, II, p. 302.
2. W.W. Tarn's view that "Apollodotus and Menander were *Soteres* because they professed to come to Indians as saviours, to 'save' them from Pushyamitra" seems untenable. The Indians saved were Buddhists according to this view, cf., *The Greeks in Bactria and India*, p. 175 (Cambridge, 1951).

depiction of a female figure often recognised as 'yakshī' or 'yakshiṇī Aśvamukhī'. The Indian nature of the female figure seems to be certain but other Indian deities failed to find favour with the Indo-Greek-kings.

The obverse of a coin type of Telephus bears a serpent legged Lotus yaksha holding lotus stalk in each hand.[1] It is definitely the depiction of an Indian nature.

Two Indian type copper coin types of Agathocles bear the hill or chaitya symbol which has been mentioned by some scholars as a, 'Buddhist stupa.' But it seems that Agathocles only borrowed these coin-motifs, for his Indian coin types imitated from the local prototypes already in circulation, and therefore they may not have anything to do with Buddhism.

A copper coin type of Menander bears a wheel on its obverse. This is sometimes taken to stand for the Buddhist *Dharmachakra*. If it really represents the Buddhist symbol Menander may have been more favourable to Indian faiths than other Indo-Greek kings.

The identification of Demetrius with Dharmamīta read in *Yuga Purāṇa* by Jayaswal was accepted by Tarn, who says that "the name has been 'adjusted' to bring in the word Dharma and to make it signify 'Friend of Justice',...it is meant to recall the traditional Dharmarāja, the ideal king of Justice of Indian literature. There were, then, Indians to whom Demetrius appeared, not as a foreign conqueror, but as the king of Justice."[2] But it has correctly been pointed out that the name of Demetrius is not found in the *Yuga Purāṇa*.[3] This suggestion makes the view of Tarn untenable.

Greeks and Buddhism

Referring to the assignment of Kshattriya status to the Greeks Tarn thinks that the Greeks thus came to be recognised as the class enemies of the Brāhmaṇas for social supremacy. As Gautama

1. *Taxila*, II, pp. 803, 836 The figure was described by Gardner (*BMC*, p. 171) as that of a Giant (Skythes ?). But now it is taken as that of an Yaksha, cf. *Corpus of Indo-Greek Coins*, p. 184; A. K. Narain, however, seems to be doubtful about it, cf. *Coin types of the Indo-Greek Kings*, p. 33.
2. W. W. Tarn, *The Greeks in Bactria and India*, pp. 178-79.
3. A. K. Narain, *The Indo-Greeks*, pp. 40-42, cf. also Appendix IV.

Buddha was also a Kshattriya, the Greeks came to be indirectly associated with Buddhism. "Buddhism in fact at this time seems to have been something more than a monastic religion; it was also to some extent the creed of a warlike aristocracy, and it is of some importance for what follows to note that one cannot apply, or can only apply with great caution, to the second century B. C. the view, drawn from later times, that Buddhism tends to render unwarlike the peoples who profess it."[1]

"Something of this sort was the position when a Brahman, the Sunga Pushyamitra, murdered the last Maurya and seized the crown. ...But he was more than a Brahman; he was a convinced, perhaps even a fanatical devotee of the Brahman religion, which he... desired to see restored as the religion of his realm. The matter at once became of concern to every Buddhist in India; they had no desire to be under the rule of a very earnest Brahman...The Greek leaders saw that they could use these feelings. Of course they fought Pushyamitra, not because he was a Brahman, but because he wanted what they wanted and was in their way; both sought control of the huge derelict empire, and war between them was inevitable. Obviously therefore any one who, for whatever cause, was an enemy of Pushyamitra might became a friend to the Greeks." It was in this wake that possibly Apollodotus and Menander used the title Soter and came to the "Indians as saviours, to 'save' them from Pushyamitra. It was entirely a political matter but it happened that the people to be 'saved' were in fact usually Buddhists, and the common enemity of Greek and Buddhist to the Sunga king threw them into each other's arms."[2]

It has at times been suggested that the Buddhists and the Greeks made an alliance against their common enemy.[3] But Tarn disbelieves the formation of an alliance like this.[4] The persecution of Buddhists is known from *Aśokāvadāna,* supposed to be written around *c.* 150–100 B. C. at Mathura.[5] It seems from the account that Pushyamitra resolved to destroy the 84000 stupas built by Aśoka. He started at Kukkuṭārāma at Pataliputra but it was saved by a miracle.

1. W. W. Tarn, *The Greeks in Bactria and India,* pp. 174-5.
2. Ibid, p. 175.
3. R. Grousset, *Histoire de l'Extreme Orient,* vol. I, p. 57, (1929).
4. Tarn, *The Greeks in Bactria and India,* pp. 175-76.
5. Przyluski, *Acoka,* p. 166.

Thereafter Pushyamitra went on to Sāgala where Buddhists were slaughtered and a gold piece was offered for the head of every monk. He was checked in the north-west and hence he marched to south where he perished.[1]

This story contains a highly coloured account which 'is not history.' However, it mentions the route of Pushyamitra "from Pataliputra to Sagala, thence north-west, and thence to the southern ocean. But at the end of the Greek advance the Greek dominions lay as a great horse-shoe round the desert, from Pataliputra to Sāgala, thence north-west, and thence to the southern ocean at Patalene and Surashtra; and what the story does is to take Pushyamitra right round the Greek horse-shoe, persecuting as he goes. This cannot be accidental coincidence.... One need not postulate religious persecution; but if some people who did not desire Pushyamitra' rule were killed at Sagala, that would have given Demetrius, whose general Menander was about to invade the eastern Punjab, an opportunity for propaganda among the Madras which he would indeed have been blind to neglect : Menander was coming to save them from the oppression of the Sunga king. But the Madras killed at Sagala had doubtless in actual fact been Buddhists, and, even if this were accidental, it might well be interpreted by Buddhists generally as religious persecution; the Greek leaders might think that they were helping Pushyamitra's enemies, but to the Buddhist world it meant that they were helping Buddhists; would they or would they not, the Greek kings, in Indian eyes, inevitably became champions of Buddhism."[2]

We do not think that these observations of Tarn are valid. The Buddhists may not have felt like being ruled by followers of Brahmanism. And they are not known to have looked towards the Indo-Greeks as their saviours. Pushyamitra may have been a staunch follower of Brahmanism but his persecution of the Buddhists is not evidenced by any positive evidence. The *Aśokāvadāna* story seems to be a very fanciful one and as such can not be relied upon much. Besides neither the Indian kingdom of the Indo-Greeks was as extensive as Tarn would have us believe nor possibly that of

1. Tarn, op. cit.

2. Tarn, *The Greeks in Bactria and India*, pp. 177-78.

Pushyamitra.[1] It appears highly doubtful that Pushyamitra undertook any campaign against the Indo-Greeks in Punjab, as indicated by *Asokāvadāna.* However, he may have pursued the Indo-Greeks and their allies, who are said to have attacked Kusumadhvaja or Pataliputra but could not stay there due to mutual struggle, to the frontiers of his kingdom. River Sindhu[2] seems to have been the northern boundary of Pushyamitra's kingdom, on the banks of which a contingent of Yavana army was defeated by Vasumitra in an altogether different context. There were considerable Buddhist establishments in Pushyamitra's own kingdom which do not seem to have suffered any set back under his rule. Hence the theory of the persecution of the Buddhists by Pushyamitra rests on uncertain grounds and therefore cannot be accepted.

Menander and Buddhism

Menander has used the title Dikaios on some of his coins, which has been connected by some to indicate his Buddhist leaning as the word is rendered in Prakrit on the reverse with *dhramika.* But possibly this title has nothing to do with Buddhism as it was used by other kings also and they had nothing to do with this faith. A bronze coin of the king bears an eight spoked wheel which we have already referred to. This is often taken to represent the Buddhist *Dharmachakra.*[3] Tarn's suggestion that the wheel refers to Menander as *chakravartin* is not correct.[4] The wheel was an already well established symbol of the Buddhists long before Menander.[5] Therefore, there is no great difficulty in accepting this wheel as the Buddhist *Dharmachakra.*[6]

The suggestion 'that Menander ever became a Buddhist in the sense of entering the Order'[7] seems to be correct. But the evidence

1. For the extent of Pushyamitra's kingdom see R C. Majumdar in *JNSI*, XXII, pp. 47 ff. And Tarn's view regarding the far-reaching conquests of Demetrius in India have been thoroughly examined by A.K. Narain, *The Indo-Greeks*, pp. 28-45.
2. The river is identified, with Indus and also with Kali Sindhu near Narwar, cf. R.C. Majumdar, *JNSI*, XXII, pp. 47 ff.
3. Marshall, *Taxila*, I, pp. 33-34.
4. Allan in *Taxila*, II, p. 859.
5. Marshal, *Taxila*, I, pp. 33-34.
6 But it may be a representation of the Wheel on which Ixion was condemned to revolve permanently in Hades according to Greek mythology.
7. Tarn, *GBI*, p. 268.

of *Milindapañha* shows his interest in Buddhism. And he may well have taken to Buddhism sometime later in his reign. According to a tradition "the origin of the most famous statue of Buddha in Indo-China, the statue of Buddha of the Emerald, which Menander's teacher Nāgasena made out of a magic emerald by his supernatural power'[1] connects its origin with the king. According to Plutarch at the death of Menander "the cities celebrated his funeral as usual in other respects, but in respect to his remains they put forth rival claims and only with difficulty came to terms, agreeing that they should divide the ashes equally and go away and should erect monuments to him in all their cities."[2] This reads like the claims and division of Buddha's relics. The very fact that Buddhist tradition remembers Menander favourably shows that he was more than inclined towards this faith.

What really made Manander interested in Buddhism possibly cannot be determined with certainty. Tarn says that Menander "had an enormous number of Buddhist subjects and he probably could not have maintained his power without their support; politically, therefore, he must have done whatever seemed advisable to ensure support, for no other course was open to him.... It is perfectly possible that Menander went further, politically, than the usual practice, and that he did take a personal interest in Buddhism in the same sort of way that Cleopatra VII was to take a personal interest in the religion of Egypt...."[3] It is quite possible that Menander took a keen interest in Buddhism as a matter of policy to ensure a smooth functioning of his state administration. Whatever be the reason, the sympathetic attitude of Menander towards Buddhism is also attested by the Bajaur casket inscription of the reign of Menander referring to the establishment of the relics of Buddha.[4]

Greeks and Indian Religions

It appears from extant evidences that many Greeks accepted Indian religions. Heliodorus, the son of Dion and an ambassador of Antialcidas to the Court of King Bhāgabhadra was a devotee of Vāsudeva-Krishṇa as can be noticed from his Besanagar inscription.[5]

1. A. K. Narain, *The Indo-Greeks*, p. 98.
2. *Moralia*, (ed. by H. N. Fowler), 821D-E (London, 1936).
3. Tarn, *GBI*, p. 268.
4. D. C. Sircar, *Select Inscriptions*, pp. 102 ff.
5. Ibid, pp. 88-9.

But it is quite possible that Heliodorus' adoption of Bhagwatism may have been guided by political reasons in instituting the pillar bearing the said inscription of Besangar. The legend on a seal of Timitra, also from Besangar refers to the institution of a Brahmanical sacrifice by him.[1] "A Greek who read Jain literature and passed a piece of his information on to 'Trogus' 'source' was, if not actually a Jain, at any rate interested in the doctrines of that sect."[2] Thaidora (or Theodorus) the son of Datiaputra, who made a tank in honour of all beings was possibly a Buddhist.[3] Another Greek Theodorus, the meridarkh was also a Buddhist. He is known to have established the relics of Lord Sakyamuni for the security of many people.[4] Another inscription refers to the establishment of a *stupa* 'by..., the Meriadarkh, together with his wife', in honour of his parents.[5] Perhaps Theodorus of the Swat relic inscription is identical with the donor of the *stupa* mentioned in the Taxila copper plate inscription.

Some other but rather indefinite donations etc. are also known from seals and records. Two cups were gifted by Theodorus, the son of Thavara.[6] Konow tried to explain Thavara from Sanskrit Sthavara but Tarn takes it to correspond with Greek name Theoros. It seems right in the sense that normally the name of Theodorus' father must also be a Greek name. A copper seal bears *Denipasa*, 'of Denipa.'[7] Tarn equates this name with Greek Deinippos. Sapha appears to have donated an image, is borne out by the Jamālagarhī image Halo inscription. Konow takes the name Sapha to correspond with Greek Sophe,[8] a faminine name. Thus it seems that all the Greeks known from inscriptions and seals were in some way associated with Indian religions and language. The seal of king Theodamas is also written in Kharoshṭhī.[9]

From the foregoing evidence it appears that the Greeks "from about the beginning of the first century B. C., ...were becoming

1. D R. Bhandarkar, *ASI*, 1914-15, p. 77.
2. Tarn, *GBI*, pp. 391, 47.
3. *CII*, I, pp. 65-66.
4. *CII*, I, pp. 1-4.
5. *CII*, I, pp. 4-5.
6. *CII*, I, pp. 98-99.
7. Ibid, p. 101, no. 7.
8. Ibid, p. 114, XLVII.
9. Ibid, p. 6.

Indianised."[1] It seems that the Greek numbers in India must have suffered seriously during the fall of the Indo-Greeks due to mutual wars and wars with the Śakas and Kushāṇas etc. It was perhaps due to this reason that the Greeks tried to maintain their numbers. The Buddhist literature mentions that dead among the Yavanas were to be buried only after their king was told about it, and the king may have enquired into the circumstances of the death.[2] The Greeks may have intermarried originally among Greeks themselves but they may also have married local girls. Marriage with Indian women must have increased in course of time and the Greeks naturally may have started taking an increasing interest in Indian religion and culture. And their political collapse, in course of time, made them ordinary citizens of the country.

Hindu View of the Greeks

Ancient Indian literature mentions that the Greeks as Yavanas. It appears from later literature that the Yavanas came to be recognised as a component of the Hindu Society. In *Mahābhāshya* (II. 4. 10) the *yavanas* are mentioned as pure or *aniravasita śūdras*. But since they came to India as invaders and ruled some of its parts they usually came to be accepted as Kshattriyas. Manu for instance mentions them as degenerated Kshattriyas.[3] The *Mahābhārata* refers to them the same way.[4] Elsewhere in *Mahābhārata* the Yavanas are mentioned as the descendants of Turvasu.[5] But according to the traditional accounts the Yavanas and others were produced by Kamadhenu to protect it from the Haihaya king Kārtavīrya Arjuna.[6] The Pauranic king Sagara of Ayodhya is said to have defeated the Haihayas and their allies the Śakas, Yavanas, Kambojas etc. but spared them due to the intervention of his priest Vasishtha. But he imposed on them 'certain signs of symbolical defeat and disgrace', and thus made them unfit for Vedic ceremonies.'[7] The Ādiparva of *Mbh.* states that the king of the Yavanas was one of the invitees to

1. Tarn, *GBI*, p. 390.
2. Ibid.
3. *Manusmriti*, X. 43–44.
4. *Mbh.* Sānti Parva, XII. 200.
5. *Yadostu Yādavā jātās Turvasoryavanāḥ sutāḥ*, *Mbh.* I, 80.26.
6. *The Vedic Age*, p. 280; *Rāmāyaṇa*, BK I. Chs. LIV, LV; *Mbh.*, Ādiparva, Ch. CLXXVII.
7. *Vāyu Purāṇa*, 88 140-41; *The Vedic Age*, pp. 286-87.

the Svayamvara of Draupadi.[1] The *Mahābhārata* mentions the Śakas, Yavanas, Vāhlikas, Andhras and Pulindas etc. as *mlechhas* who would try to destroy the Brahmanical law, religion and society. They will promote materialism and atheism and would encourage the construction of *Eḍukas* or Buddhist *stupas* all over the country.[2]

These accounts reveal clearly that though the Yavanas came to be recognised as Kshattriyas, the champions of the Brāhmaṇa faith remained contemptuous about them. And this view they retained in their traditions for the political bodies of the Yavanas even later. For we are not sure as to whether they were able to distinguish the later descendants of the Greeks of the earlier periods and if so, the same attitude was accorded to them also or not. Possibly they were not able to distinguish the later descendants of the early Greeks or the Yavanas. That is why in most accounts the Yavanas are mentioned after the Śakas whereas being the first invaders of the country they should have been mentioned earlier than the latter. Thus it seems that the later Indians used their traditional knowledge about the Yavanas as a political and social people who were possibly not as inclined towards Brahmanism as they were towards Buddhism among Indian religions.

But the coins of the Indo-Greeks clearly point out their firm belief in the Greek traditions and deities. It seems, therefore, safe enough to conclude that during their kingship they only tried to maintain their own religion and institutions, possibly with conviction and firmness. But local conditions forced them to allow some indigenous cultural elements in their political and social life with a view to win local population to support their Kingship. And certain important Greek personages were either attracted towards Indian religions or took to them for political reasons.

1. *Mbh.*, Adiparva, CLXXXXIX. 15.
2 *Mbh.*, Vanaparva, Chs. 188 and 190.

A STUDY ON MANUFACTURING OF COINS IN ANCIENT INDIA AS REVEALED FROM THE ARTHASASTRA

T. P. Verma

A careful handling of ancient Indian coins will reveal to a student of numismatics that there were at least three systems of manufacturing coins prevalent in ancient India. In modern terminology we have named these as (i) punching system, (ii) casting system and, (iii) die-striking system. Of these, the punching system is the earliest technique employed by the ancient Indians. The casting system comes next to it so far as the chronological sequence is concerned.[1] B. Sahni has written an excellent monograph[2] on this aspect of minting; and though several new moulds have come to light since then, little new can be added to it as regards the technical aspect of manufacturing cast coins. But, on the other hand, very little has been written on the technique of punching and die-striking systems prevalent in ancient India.

In fact the die-striking is an improvement upon the punching technique. In a die desired symbols are carved at one time in a specific space and shape, and, there by the time in striking is saved and the shape of the coin is regularised. Here it should be pointed out that the die-struck coins of ancient India, however, are in the tradition of Indo-Greek, Śaka-Pahlava, Kushāṇa coinage.

The famous *sūtra* of Pāṇini, *rūpādāhata praśaṁśayoryap,* gives the word *āhata* for striking. A later work, *Kāśikā*[3] tells us that *dināras* and other such coins, which were manufactured by striking at the anvil, were called *āhata*. It is not unreasonable for the *Kāśikākāra* to call a die-struck coin such as *dināra,* an *āhata-mudrā* or coin. But technically speaking about the punch-marked coins, it will not do

1. [The Archaeological evidence suggests that the use of both the techniques, punching and casting in the manufacture of the coins began at the same time. On the other hand, the excavations at Kausambi revealed that the coins minted by the cast technique are earlier than the punch-marked coins, though the evidence is not accounted for and we take that both the techniques were employed side by side for the minting of the coins. -*N.A.*]
2. Sahni, Birbal, *The Technique of Casting Coins in Ancient India,* 1945.
3. निघातिका ताडनादिना दीनारादिषु रूपं यदुत्पाद्यते तदाहतमित्युच्यते ।

justice to the *sūtra* of Pāṇini. Pāṇini speaks of striking *rūpa* on a piece of metal to make it a *rūpya* or coin which in all probability refers to punch-marked coins. Kauṭilya tells of a *bimbaṭaṅka*[1] by means of which a coin forgerer could counterfeit coins. This *bimbaṭaṅka* seems to be the punch, with symbol on it, used for punching coins. Curiously enough, this has been mentioned as an article which could be purchased, which may mean that the state had little control over this instrument. Or, on the other hand, it may be interpreted in the sense that *rūpa* or symbol was to be incised on the *bimbaṭanka* by the *kūṭarūpakāraka* or the manufacturer of false or counterfeit coins, after its purchase.

This *bimbaṭanka* was, as we can imagine, perhaps an instrument not quite different from the seal of the mediaeval period which was 'held by a workman called *batekari*',[2] and 'a third man' used to give 'a blow with six pound hammer' in the process of minting coins. Could this *batekari* be a corrupt form of *bimbaṭaṅkaṇī* ? The only difference in a mediaeval minting was that the coin had to have impressions on both sides therefore the anvil or *nighāṭikā* also had some inscription or symbols incised on it. The punch-marked coins had their symbols on only one side and therefore the anvil or *adhikaraṇī*[3] of Kauṭilya had no symbols on it.

It is an accepted fact that punch-marked coins had all the symbols punched separately. A careful study of these will show that in the words of Arvamuthan,[4] 'the impress of each mark varies in depth and direction; in one piece the peak of the 'hill' may be more deeply impressed than the base, in another the right slope deeper than the left and, in a third, the base deeper than the peak, and so on, ad infinitum.' Again, to quote the same authority, this is due to 'the punch having been held in different degrees of slant on different flans or to different punches having been differently applied to the same flan.' On the analogy of a mediaeval mint as described by Sircar[5] and others[6] it may be presumed that only one punch was

1. *The Kauṭilīya Arthaśāstra*, Part I, Ed by R. P. Kangle, 4.4.20. All references of Arthaśāstra in this article are from this edition unless otherwise stated.
2. *Bombay Gazetteer*, XVI, p. 429 quoted by D. C. Sircar in *JNSI*, VII. p. 80.
3. Op. cit. 4.4.20.
4. *JNSI*, X. p. 7.
5. *JNSI*, VII, pp. 78-93.
6. Cf. Sinha, R. M., *ibid.* Vol. XVIII. pp. 86-100.

impressed by a workman and then it had to be passed on to other *karuka* or artisan for impressing the other symbol, and so on. Do the impression of a certain symbol by an artisan or *karuka* mean anything, for example, say clearance of certain tax or the cost of manufacturing of coin etc. ? If the answer is to be in affirmative we must be permitted to speculate on this point. As speculation is neither always misleading nor always correct one should not take it for granted but a creative criticism will always be a welcome.

The author of *Arthaśastra* prescribes the duty of a *rupadarśaka*[1] to establish *(sthāpayet)* currency *(paṇayātrā)* for the purposes of trade-commerce and for receipts in the treasury (*vyāvahārika* and *kosha-praveśya*). R. P. Kangle[2] thinks that it is meant here to establish two sets of currency, one for trade purposes and the other for payments to the treasury. He also quotes Breloer,[3] who, however, goes one step further and, opines that copper coins were used for trade and silver coins alone came into the treasury. To support such views we have no evidence.

In the next *sūtra* three types of taxes are prescribed for manufacturing coins, evidently to be realised by the *rūpadarśaka*.

These are:

Rūpika	8%
Vyājī	5%
Pārīkshika	1/8%

R. P. Kangle translates *rūpika* as manufacturing charges which is acceptable.[4] But while translating *sūtra* 30 he doubts his translation of this word as manufacturing fee. In this *sūtra* this fee is said to be charged on the sale of one-sixth government's share on imported salt. For Kauṭilya this does not seem unnatural who at one place imposes tax on fines[5] also and in the next verse he justifies the illegal *(avadharmistha)* tax. A. Master[6] takes it to be partly seigniorage and partly compensation for depreciation. While P. L. Gupta,[7] L. Gopal[8]

1. Op. cit. 2.12.25.
2. Op. cit., part II, p. 124 and also part II, p. 181.
3. Ibid, p. 125, f.n. 26.
4. Ibid, f.n. 30.
5. Op. cit., part I, 3.17.15-16.
6. *NS*, XL, p. 10.
7. *JNSI*, XXII. p. 35.
8. Ibid, p. 41.

and others regard it indirect seigniorage or simply seigniorage. This tax was levied on salt also, as indicated above. Further, *rūpika* was one of the main sources of income *(āyamukham)*.[1] Keeping all these things in view it will be more precise to translate *rūpika* as manufacturing charges which in case of coin minting will include charges for melting, cleansing, cutting and shaping as well as cost of charcoal, crucibles and labour charges etc.

The next term is *vyājī* which amounted to 5%. Kangle translates it here as 'commission'[2] and as 'surcharge'[3] elsewhere. In a footnote[4] he observes that "*vyājī* is a sort of excess in measure or weight charged when goods were received in the treasury or stores. It amounts to a surcharge of 5% on every transaction.... It seems to have originated in the idea of a possible shortfall during measuring or weighing which required to be made good by this surcharge. Breloer (Kst, III, 185) thinks that the object of *vyājī* is to recover the cost of apparatus used for measuring etc." However, P. L. Gupta[5] seems to be more correct when he explains it as 'a compensatory amount that was paid to balance the gain or loss in transaction due to difference in weights and measures." The probable process seems to be, as hinted by Gupta, that the people brought the bullion to the *rūpadarśaka,* who exchanged it for readymade coins and charged these taxes.

While discussing fines related to coin manufacturing and examining Kauṭilya states that with the clearance of *vyājī* only it becomes a currency.[6] It is nowhere stated in the *Arthaśastra* how *rūpadarśaka* will establish currency or how he could declare a currency cleared off the *vyājī* charges. In all probability he was authorised to punch certain symbol on the money which was a declaration certificate in itself. Further he had also to declare a coin, by punching another symbol, as cleared off the *rūpika* tax. In the same way he had to punch another symbol certifying there by

1. Op. cit., I, 2.6.10. मूल्यं भागो व्याजी परिघः क्लृप्तं रूपिकमत्ययश्चायमुखम ।
2. Op. cit., II, p. 125.
3. Ibid, p. 125, 88, 91 and several other places.
4. Ibid, p. 88, f.n. 10.
5. *JNSI*, XXII, p. 36.
6. Op. cit. 4.1.45. व्याजी परिशुद्धौ पणयात्रा ।

that he had thoroughly examined the coin and found upto the standard specified by the State. This was a great power vested in him giving him more chances to be corrupt. Kauṭilya prescribes a fine of twelve paṇa to a *rūpadarśaka* who accepts a bribe of one māshka for certifying one undeserving paṇa.[1] The next sūtra says that fine will increase accordingly.[2] At some other place Kauṭilya says that the treasurer or *sannidhātā* should accept only that money, *hiraṇya,* which is certified as pure by the *rūpadarśaka.* And impure money be cut *chedayata.* The person who brings such coins be fined the lowest fine for violence.[3] Thus occasions for a *rūpadarśaka* being corrupt were much more. He could also harass people by rejecting a genuine currency and favour some by accepting coins which should not be accepted. For such an offence Kauṭilya prescribes a fine of twelve *paṇas.*[4]

If we accept above functions of *rūpadarśaka* we may imagine that he was authorised to stamp at least three punches on a coin. But on a silver punch-marked coin, which have been attributed to the Mauryas, we find five symbols punched on them. What, then, will be the probable explanation for the other two symbols ? For that we will have to turn to the functions of *lakshaṇādhyaksha.* A *lakshaṇādhyaksha* was required to mint silver and copper coins only.[5] Minting of gold coins is nowhere prescribed in the *Arthaśāstra.* As regard silver coins they should contain eleven parts of pure silver, four parts of copper and one part of any hardening alloy like iron, tin, lead and antimony. It was to be minted in denominations of 1 *paṇa,* $\frac{1}{2}$ *paṇa,* $\frac{1}{4}$ *paṇa* and 1/8 *paṇa.* Purity of a copper coin, however, is not clear.

Explaining the words, *pādajīvam,* R. Shamasastry[6] and Kangle[7] both agree that a copper coin should contain one fourth part of an

1. Ibid, 4.1.46. पणान्माषकमुपजीवतो द्वादश पणो दण्डः ।
2. Ibid, 4.1.47. तेनोत्तरम् व्याख्यातम् ।
3. Ibid, 2.5.10-11. रूपदर्शक–विशुद्ध हिरण्यं प्रतिगृह्णीयात्। अशुद्ध छेदयत्। आहंतुः पूर्वः साहस दण्डः ।
4. Ibid, 4.1.44.
5. Ibid, 2.12.24.
6. Translation by R. Shamasastry, p. 95.
7. Op. cit., III, p. 124.

alloy. Commentator,[1] however, explains that to mean one fourth silver, eleven parts copper and one *māsha* alloy. This is not acceptable because so far no copper punch-marked coin has been reported to contain such a heavy proportion of silver. It is also unlikely that a copper coin should contain a quarter part of alloy like iron, tin, lead etc. As regards the denominations of a copper coin only a *māshaka* and lower than that are mentioned to be coined if we explain the *sūtra* in that way which is incinceiveable for copper currency. This goes also against the punch-marked copper coin found so far. We have to explain *pādajīvam* in context with the silver coinage, *raupya rūpa,* i. e., copper coins also were of the denominations upto *pāda* (as silver coins are: viz. 1 *paṇa,* ½ *paṇa* and ¼ *paṇa*) and further it should be made in the denominations of 1 *māshaka,* ½ *māshaka,* 1 *kākaṇī* and ½ *kākaṇī.*

Thus we find that the duties of the *lakshaṇādhyaksha* was to control the purity of metal and weights of the denominations of both the series of coinage. His job was, perhaps, finished after minting coinage of the required denominations and then it was made available to public or directly sent to the *rūpadarśaka* to establish it as a currency after charging all three types of taxes and certifying it by means of punching three separate symbols each signifying a specific tax. But in its own turn the *lakshaṇādhyaksha* was also required to certify that the money was minted by him. Therefore, he was required to punch his personal or mint's symbol certifying that it was minted under his supervision. We may here suggest that the six-armed symbol was the symbol of the mint or Mint-Master. Variations in the symbol may be explained due to the establishment of many mints at various headquarters of provinces. There are less variations in this symbol as compared to other symbols except the sun symbol which was probably the imperial symbol continuing throughout the tenure of the dynasty. But variations in the six-armed symbol are so many that it forces one to think that a *shaḍar lāñchana* was Mint-Master's symbol. The Mint-Master or *Lakshaṇādhyaksha* was authorised to punch the imperial symbol also along with his own. This imperial sun symbol was the same throughout the length and breadth of empire.

There are reasons to believe that there were more *rūpadarśakas* in number than the *lakshaṇādhyakshas*. Kauṭilya prescribes the establish-

1. R. Shamasastry, op. cit., p. 95 f.n. 4 and Kangle, part II, p. 134, f.n. 4. 2.

ment of the offices collecting *rūpam rūpikam* (i. e. taxes on coins) and other taxes in almost every market place.[1] These *rūpadarśakas* were perhaps equipped with a supply of various denominations of silver and copper coins having already two symbols punched by the *lakshaṇādhyaksha* of the province or region. And thus they were able to supply coins to the public for trade and receipts in the treasury by punching three symbols as a certificate of the clearance of the State taxes on these coins. In order to recognise and differentiate the symbols of one *rūpadarśaka* from the other, which was necessary to find out the corrupt officers, the State probably had supplied separate sets of symbols or *bimbaṭaṅkas* to each and every *rūpadarśaka*. This explains the multiplicity of the 3rd, 4th and 5th symbols on the punch-marked coins. It is also probable that these *bimbaṭaṅks* were assigned on the locality basis.

This explanation probably satisfies the description of the *heraṇṇika* of *Visuddhimagga* who could tell by examining the signs punched on coins, by judging their weight shape etc., the place of its manufacture etc.[2]

One may not like my interpretation of the symbols on punch-marked coins on the basis of his wide experience of this series of coins. Admitting my limited knowledge and experience of this series of coinage I must submit that there is no basis for the traditional attribution of symbols to king, dynasty, etc. Further nothing can be said with definite emphasis about the placing and attribution of the third, fourth or fifth symbols. What about the punch-marked coins with three or four symbols ?

Mauryan punch-marked coins with five symbols on it did not appear on the scene without any precedence. The predecessors of the Mauryas, who issued so-called local coins, did not punch three or four symbols on them just for fun. These punches were certificates of the clearances of the taxes and had the guarantee of the State that these are pure. These also must have some indication of their place of manufacture. The elaborate taxation system during the time of the Mauryas, if we accept the *Arthaśāstra* dealing with the administration of the Maurya period, suggests us to believe that not

1. Op. cit. 2.12, 35-36
2. *JNSI*, XXII, p. 31, f.n. 1, quoted from *Visuddhimagga*, Chap. XIV.

only the rate of taxes might have been increased but certain new taxes also have been imposed on the coinage. Increase in the number of the symbols of Maurya punch-marked coins supports this view.

Once we accept *rūpika, vyājī* and *pārīkshika* as taxes we cannot interpret the *sūtra* which speaks that a coin becomes 'currency only after the clearance of *vyājī* tax; except that there was some instrument to indicate the payment of the taxes. The context in which this *sūtra* occurs also supports this suggestion. A translation of the relevant portions is as follows.[1]

'For the Examiner of coins rejecting an established currency which does not deserve to be rejected or not rejecting one deserving to be rejected the fine is twelve *paṇas*. By that are explained further cases. For one causing counterfeit coins to be made or receiving it or sending it into circulation the fine is one thousand *paṇas*, for inserting it into the treasury (the penalty is) death.'

Kangle, in the foot note of his translation,[2] observes that "with the term *vyājī* which is 5%, *rūpika* 8% and *pārīkshika* 1/8% are also to be understood. *Paṇānmāshakomupajīvita* appears to be bribe of one māshaka for every *paṇa* certified. The trader pays 1/16th i. e., 6¼% and escapes 5 plus 8 plus 1/8 i. e., 13⅛%. However, *Bhaśāyākhyāna* and *Śrīmūla* commentaries think that it is the *lakshaṇādhyaksha* who misappropriates a *māsha* of silver from one *paṇa* at the time of minting. That officer, however, is not mentioned here. Moreover, that would be counterfeit coin for making which the fine is very heavy."

Thus it is clear that a *rūpadarśaka* could :

1. establish the currency after the *lakshaṇādhyaksha* has minted the coins of specific purity and denominations in copper and silver,[3]

1. 4.2.44–48.
रूपदर्शकस्य स्थितां पणयात्रामकोप्यां कोपयत: कोप्यामकोपयतो द्वादश पणो दण्ड: ।४४। व्याजी परिशुद्धौ पणयात्रा ।४५। पणान्माषकमुपजीवतो द्वादश पणो दण्ड: ।४६। तेनोत्तरम् व्याख्यातम् ।४७। कूटरूपकारयत: प्रतिगृह्णतो निर्यापयतो वा सहस्रं दण्ड:; कोशे प्रक्षिपतो वध: ।४८।
2. P. 298, f.n. 11-18.
3. 2.12.24-25.

2. accept or reject a currency after examining it,[1] certain fine is prescribed for misuse of this right;

3. establish a currency or *paṇayātrā* after charging certain taxes;[2] for accepting bribe to certify a currency some fine is prescribed.[3]

Keeping in view the above facts it is natural to think that this officer must have been provided with some instrument by the State through which a coin may be detected if the tax is not paid. That may be the system of symbols. Mention of counterfeiter, *Kutarūpakāraka,* is important in this context. A *kūṭarūpakāraka*[4] could counterfeit coins with the help of several instruments including *biṁbaṭaṅka.* With the help of this *biṁbaṭaṅka* he could certify the currency himself and make it current. In this way *rūpadarśaka,* though being ignorant, might be penalised. For such *kūṭarūpakārakas* spies were to be utilised.[5]

Thus we have sufficient reasons to suggest that *rūpadarśaka* had to punch certain symbols as mark of the payment of taxes.

It is admitted almost unanimously that four-symbol coins are earlier than five symbol ones and three symbol coins are even earlier. What necessiated the succeeding dynasties to increase the number of symbols ? The answer is obviously in the developing economy and increasing complicated system of taxation the culmination of which we find in the *Arthaśāstra* of Kauṭilya. This was, in all probability, the indiginous evolution of the system. But after the fall of the Mauryan dynasty India came into vigorous contact of the West and due to the absence of a central authority petty states sprung up especially in the North-Western portions of ancient India. They were very much influenced by the Indo-Greeks and most of them followed their pattern of striking coins and inscribing name of the ruler on the coinage. They obviously followed their system of economy also as regards the coinage system. This was continued by the Śakas, Pahlavas and Kushāṇa and when the Guptas came in

1. 4.1.44.
2. 4.1.45 and 2.12.25-26.
3. 4.1.46-47.
4. 4.4.20.
5. 4.4. 20-21.

prominence they succeeded their heritage and indigenous system of currency was almost forgotten.

To conclude if we take *paṇayātrā* to mean currency we cannot explain the sūtra *vyājīpariśuddhau paṇayātrā* without such interpretation.

With the manufacture of coins in ancient India is related the right of minting also. It was V. A. Smith who first advocated the view that symbols on the punch-marked coins were private issues of moneyers and traders. But now nobody believes in this theory. As we have seen from the *Arthaśāstra* state was the sole authority to issue coins. A fine of twenty five *paṇas* was prescribed for those who manufacture, sell, purchase or get the coins examined in other places.[1] A fine of one thousand *paṇas* is imposed for one causing a counterfeit coin to be made or receiving it, and (penalty for) sending it into treasury was death.[2] A strict vigilance was made on such persons.[3] However, we do not have any record discussing the authority of state as regards the minting of coinage in subsequent period. But it seems that state's authority on this subject was so much established that it was almost irrelevant to think in that direction. No coin in India, except the so-called *gadhia* coins,[4] has been found which was not supported by the royal authority.

In this connection the mention of Negama coins be made which are thought to be the currency of the trade guilds. Jayaswala,[5] Bhandarkar[6] and Lallanji Gopal[7] interpret these to be the issues of such city states or trade guilds.[8] P. L. Gupta[9] and Upendra Thakur[10] on the other hand think that these are token issues of the trade guilds in the same fashion as in the modern period "big business

1. Op. cit. 2.12.26.
2. Ibid., 4.1 48.
3. Ibid., 4 4.21.
4. Gupta, P. L., his paper read in Lucknow Seminar, 1967-68, entitled *'Right of Minting Coins in Medieval India.'*
5. *Hindu Polity*, p. 254.
6. *Lectures on Ancient Indian Numismatics*, p. 175 f.n.
7. *JNSI*, XXII, p. 41.
8. K. K. Thapliyala, *JNSI*, also advocates this view on the basis of several negama seals, 1960, pp. 132 ff.
9. His Seminar Paper.
10. *JNSI*, XXIII, p. 177.

houses, factories and associations of the Western countries and the tea-plants of Assam in our own country are known to have issued such metallic pieces, which are of a definite weight, shape and size and bear the stamp of their authority, and thus satisfy the strict definition of 'coins'. They are issued in terms of coins and used like coins amongst their employees and customers. The former are paid their wages and bonus in these metallic pieces and the latter have then in exchange of such with these pieces, in turn people may obtain whatever they may like at the issuers' shop. Thus they precisely serve the purpose of coins, yet they cannot be compared, in their utility, with the coins, issued by the States. No value is attached to these metallic pieces, outside the limited sphere of the issuers. And as such, these pieces are distinguished from the coins by the name 'Token'."[1]

During the mediaeval period the practice of *hundis* was prevalent amongst the merchants. In all probability these *negama* issues may be classed as 'tokens' or *hundis*.

The main characteristic feature of these negama coins is that they bear the legend *negama, Kadare nekama* or *pañcha-nekame* on the one side and the legends like *rālimasa, dojaka, atakatakā* or *hirañasame* on the other.[2] Obviously the first group of the legends is intended to denote the name of the corporate body or trading firm who issued the token. The other group of the legends may be suggested to denote the value it will fetch to the bearer in currency. I have not been able to work sufficiently on this issue but here I am giving probable suggestions on which further investigation may be done. *Atakatakā* may be taken to bear the value equivalent to eight *taṅkas*, similarly *dojaka* may be of the value of two coins. *Hirañasame* may be regarded as speaking of its value equivalent to hiraṇya (i. e. a definite value). I agree with P. L. Gupta that *hiraṇya* in ancient literature is used in the sense of wealth.[3] The story of Babbu Jātaka tells us about the treasure of forty crores *hiraṇṇa* of which her wife, reborn as a mouse, gives to a stone-cutter one, two or even three *kārshāpaṇas* every day. P. L. Gupta is perfectly right in observing that "here the treasure is stated to consist of forty crores of *hiraṇṇa*, which are

1. Gupta, P. L., op. cit.
2. Allan, *BMC, AI*, pp. cxxvi ff.
3. *JNSI*, XXII, pp. 30-31.

afterwards referred to as *kārshāpaṇa*, by giving of which the hoard was exhausted. *Kārshāpaṇa* having been used as a synonym of *hiraṇṇa*, no doubt can be entertained as to *hiraṇya* being used here for coin or wealth and not for gold."

Some one may object on the interpretation of *Dojaka* and *atakatakā* on the basis of the weight of these pieces. A token bearing a denomination on it need not vary according to denomination. These may be similar in appearance and weight though their value may differ. However, I am not adamant on proving the negama pieces as tokens, because of the fact that we have no example of tokens in ancient Indian numismatics and that the word *taṅka* though appears in *Arthaśāstra* in connection with the manufacture of coins its uses as a currency occurs in the mediaeval period only. In this article I have given some suggestions in this regard on the basis of which further investigation can be done.

We are not sure if a *taṅka* was a coin in those early times but we know that Kauṭilya has used this word.[1] We have also to find out from ancient Greek, Persian and Indian literary sources if these terms were used in the sense of coins etc.

1. Op. cit. 4.4.20.

A COIN OF THE CITY STATE OF TAGARA

Chandrashekhar Gupta

[Pl. I]

Mirashi and Brahmanand Despande have published a small copper coin found at Akola.[1] It is a cast coin, ·8 cm. in diameter and weighing 13.6 grains. They attributed the coin to *Rājanya Gaṇa,* one of the famous tribal republics of ancient India. A number of coins of this *Gaṇa* have been collected from Hoshiyarpur and Mathura regions. These coins were studied and catalouged by scholars like A. Cunnigham,[2] V. A. Smith[3] and J. Allan.[4] As already pointed out by Mirashi and Despande, these coins do not show any similarity with the coin published by them. The latter not only differs from them in size and weight, but also in other details. For these reasons this coin was described by them as a unique one. But a close study of the coin under discussion proves that it has nothing to do with the *Rājanya Gaṇa.* According to Mirashi and Despande, the obverse of the coin bears the legend *Rajaña* in relief with an horizontally placed indistinct sign resembling a goad below, and the reverse contains the figure of humped bull to left with a curve in front inside a circle of dots. They have dated this coin in the first century B. C. on the basis of the palaeography of the Brāhmī legend on the *Rājanya Gaṇa* coins.

It is proposed to discuss here the reading given by them in some detail.

The first difficulty we come across while reading the legend as given by Mirashi and Despande is that its two letters are placed horizontally while the third one (that too not in a vertical position) is below the second. So we have to change the direction of the plate a number of times. The horizontal line with a knob at its one end and a short vertical line at its other end has been taken by the

1. *JNSI,* XXXI, pp. 177–179.
2. *Coins of Ancient India,* p. 89, pl. VIII, 19.
3. *Catalogue of the Coins in the Indian Museum,* Vol. I, Calcutta, pp. 179-180, pl. XXI. 11.
4. *Catalogue of the Coins of Ancient India,* pp. 210–213, pl. XXIX. For a coin from Taxila Excavations. See. J. Marshall, *Taxila,* Vol. II, pp. 805, 837.

above mentioned scholars as '*Rā*'. Therefore, according to them we should set the photograph published in the plate in such a manner as this line may be in a vertical position. We find it difficult to take it as '*Rā*' as the horizontal stroke to its left would actually make it '*Re*'. Next comes the sign considered as '*ja*'. At first sight it appears like 'E' *(ja)*. The photographs of the obverse and reverse of the coin under study are enlarged and clear. One can easily see a small gap between the first and the rest horizontal strokes. The line drawing of the obverse of the coin **(Pl. I. 1)** will make it clear. So this sign in no case represents '*ja*'. Now remains the third letter which is just below the privious one, and is read by the scholars as '*ña*'. No parallels can be shown for this form of '*ña*' and therefore this symbol can not stand for '*ña*'.

As mentioned above, the reverse of this coin bears the figure of a humped bull. No doubt the reverse of the coins of the *Rājanya Gaṇa* has the humped bull standing as on this coin, but there is a major difference between the circles that encircle the bull on these coins. The circle on this alleged coin of the *Rājanya Gaṇa* is a dotted one while the circumference of the coins of *Rājanya Gaṇa* is composed of rays.[1]

The above discussion is enough to prove that the coin under review does not really belong to the *Rājanya Gaṇa*. I had been to Dr. Mirashi to see the coin in original. But as it was returned to its owner, he could not show it to me. I have discussed with him my reading which I propose to put forth here.

I take the position of the obverse of the coin as published in the plate to be correct. The pellet on the top and the horizontal line below it appear to me to be a symbolical representation of the sun and a banner. The knob at its left end is probably the basement and the short line at the other end stands for *paṭṭa* or flag. There is some symbol at the extreme left of the coin which is taken by Mirashi and Despande to be a goad. To me it looks like a ship.[2]

Just below the *dhvaja* symbol the legend is placed. It comprises three *aksharas* written in the Brāhmī of 2nd-1st cent. B. C. and reads *Tagara*. The forms of the first and the third letter, are quite common

1. Allan, *op. cit.;* Smith, *op. cit.* pl. XXI. 11.
2. Motichandra, *Sārthavāha*, pl. 1 and 3.

in the early epigraphs. Only the horizontal line attached to the top of the first *akshara* may make one to read it as '*To*' but it may be a part of the sign at the left and probably represents the mast of the ship. Due to the carelessness of the engraver it is joined with this *akshara*. The second letter '*Ga*' is of course of an unusual shape. In some inscriptions, however we come across this typical form of '*Ga*'.[1]

The legend '*Tagara*' appears to me to be the name of the ancient city of Tagara or Tagarapura. It is identified with modern Ter, a village situated in the Osmanabad District of Maharashtra. In inscriptions it is mentioned as Tagarapura[2] and in literary sources as Tagara[3] and Tagarā.[4]

The author of the *Periplus of the Erythrean Sea* describes it as one of the important cities of Dakhinabades (Dakshiṇāpath).[5] It is also mentioned by Ptolemy as an important trade centre.[6] According to the Jaina sources, it was situated in the Ābhīra country and was a beautiful city.[7]

Ter was an important centre of inland and international trade importing and exporting a number of items from and to various countries.[8] The city of Tagara lay on a ancient trade route. Caravans from the Govardhana country (Nasik region) and from Śūrpāraka (Sopara) crossed the Indhyādri (Sahyādri ranges) hill

1. A H. Dani, *Indian Palaeography*, pl. VI a.
2 *JRAS*, IV, p. 38; V. V. Mirashi, *Saṁśodhanmuktāvali*, Sar 5, p. 182. A Kadamba grant of Mahārāja Bogivarman mentions *Tagare Mahāgrāma* consisting of the twentyfour *pallis* situated in the *Tagare Vishaya*. D. C. Sircar places this *Tagare* in Belure Taluka. (*Successors of the Sātavāhanas*, pp. 304–305). Our coin do not appear to be issued by this *Tagare* though the legend on the coin may read as *Tagare* if the short line to the left of the letter '*Ra*' is considered for the mediel '*e*'.
3. *Karakaṇḍachariu*, Edited by Hiralal Jain, Karanja, 1934, IV; VI; *Bṛihatkathākośa*, Edited by A. N. Upadhye, Singhi Jain Series, Bombay, 138.39; 56.52.
4. Jagdish Chandra Jain, *Life in Ancient India as depicted in the Jain Canons*, pp. 263, 341.
5. Pp. 50–51.
6. Mc Crindle, *Ancient India as described by Ptolemy*, Edited by Surendranath Mujumdar, pp. 79, 175–178.
7. J. C. Jain, *op. cit.*
8. Motichandra, *op. cit.*, pp. 102, 128.

to reach their destination, Pratishṭhāna (Paithan), the capital of Sātavāhana Empire and a great commercial centre. From Pratishṭhāna this route further proceeded southwards to meet Tagara. The route almost followed the present day Chalisgaon—Aurangabad—Paithan Road.[1] The status attainded by Tagara a few centuries before and after the Christian Era has been revealed by the archaeologists. Excavations were carried out here and sufficient archaeological evidence has come forth to prove the prosperity enjoyed by this city in ancient times.[2]

This territory formed a part of the Aśokan Empire. It appears that *Tagara* along with other cities emerged as an independent and sovereign city state in the 2nd Cent. B. C. as the descendants of Aśoka were too weak to have any hold in the South. But this position did not survive for a long period as the rising Sātavāhanas soon included this country in their kingdom. As a token of its sovereignty the city state of *Tagara* might have struck its own coins with the name of the city like those of a number of city states of ancient India including *Erakaṇya, Kosāmbi, Ujeni, Māhishmatī* etc.

In the present state of our knowledge it is difficult to say anything about the type of the government of the city state of *Tagara,* but to the list of the ancient Indian city states[3] a new name is added by the discovery of the present coin.[4]

1. Despandey, M. N., *Ancient India,* No. 15, pp. 68-69.
2. B. N. Chapekar, *Report on the Excavations at Ter,* Poona, 1969; *Indian Archaeology—*1957-58—*A review,* pp. 23 ff.; *ibid,*—1967-68; pp. 35 ff.
3. For the general characterestics of ancient Indian city states see an interesting paper by S. L. Katare in *JNSI,* XIII, pp. 40-45.
4. [This is a very interesting coin indeed. It may be incidentally pointed out that the suggestion of the author of the present note was commended by Mirashi himself in a public meeting held at the Vidarbha Research Society, Nagpur—*A.M.S.*]

TEXT-RESTORATION
OF
GENEALOGICAL GUPTA SEALS

Nisar Ahmad

The members of Purugupta's lineage are credited with having issued royal seals with their genealogy, which enables the historians to thrash out some controversial problems. But unfortunately the seals of Budhagupta, Narasiṁhagupta, Vainyagupta and Vishṇugupta found in the excavations at Nalanda are broken ; but, except for that of Vainyagupta, they are not broken so seriously that the names of the issuer's predecessors cannot be read or restored.

The seals of Budhagupta[1] and Narasiṁhagupta[2] have been restored satisfactorily,[3] though some of the letters actually seen at the right end of Budhagupta's seal have been read hypothetically in the left hand broken part. One complete seal of the Kumāragupta (III)[4] was also found at Nalanda but some of the letters read by the editor in a certain line, actually occur in the following line, which will be pointed out at proper place in this article. It may also be indicated that the letter *ra* at the end of line 5 of the Bhitari seal of Kumāragupta III, read by Hoernle, does not exist there and all the seals of this king have the same number of the letters in each line. However, the restoration of the seals of Vainyagupta and Vishṇugupta is the main objective of this paper.

A word of explanation is required about the method of treatment for the restoration of the inscriptions of the genealogical Gupta seals. For this we have tried to experiment with a statistical method which is entirely a new technique in the field of Indian epigraphy. It may also be said that though the inscribers appear to have engraved every letter just under the letter of the preceding line, but we should admit here that these seals are the products

1. *MASI*, 66, p. 64, pl. VIII. *a*.
2. Ibid, p. 65, pl. VIII. *b* - *c*.
3. *IHQ*, XIX, pp. 119 ff; ibid, pp. 272 ff.
4. *MASI*, pp. 65-6, pl. VIII. *d*.

of the manual and not any mechanical process and were inscribed at various times and by different writers and, therefore, these can be regarded to stand against our approach. However, we make sufficiently clear in section I of this paper that these seals bear certain common characteristics and features which encouraged the author to attempt this problem on this new method. Here it works satisfactorily and now it is left to the scholars to express their reactions. The author, however, do not claim his restorations as final.

I

The Gupta seals under study are issued by five rulers namely Budhagupta, Narasiṁhagupta, Kumāragupta (III), Vishṇugupta and Vainyagupta. Among them, Budhagupta and Narasiṁhagupta call themselves the sons of Purugupta; Kumāragupta claims to be the son of Narasiṁhagupta and the grandson of Purugupta; Vishṇugupta mentions himself as the son of Kumāragupta and the grandson of Narasiṁhagupta; and, of Vainyagupta, the pedigree is unknown, since his seal is broken seriously. Hence the following genealogical tree comes up.

Purugupta
- Budhagupta
- Narasiṁhagupta
  - Kumāragupta (III)
    - Vishṇugupta

?
- Vainyagupta

These seals issued by four successors of Purugupta belonging to three generations, i. e. (i) his sons Budhagupta and Narasiṁhagupta, (ii) his grandson Kumāragupta (III) and (iii) his great grandson Vishṇugupta,[1] have certain common basic features, of course, with some variations. For the sake of a clear and critical analysis these may be designated as group I, II and III. The fundamental features marked in these groups, if considered, help us in the restoration of the fragmentary specimens. They are as follows:

1. The matter in all the seals is distributed into eight lines.

1. *MASI*, 66, pp. 64 ff; *EI*, XXVI, pp. 235 ff.

2. The number of letters occurring in each line of the Narasiṁhagupta's seal which have been correctly restored[1] are as follows :—

Line	1.	36	Letters
,,	2.	36	,,
,,	3.	34	,,
,,	4.	34	,,
,,	5.	32	,,
,,	6.	31	,,
,,	7.	24	,,
,,	8.	16	,,

3. The above restored seal of Narasiṁhagupta and the complete seals of Kumāragupta (III) show that the letters of the inscription are arranged taperingly.[2]

4. The first line of each seal contains the names of two kings.

5. In the seals of group III, viz. the seals of Vainyagupta and Vishṇugupta, the addition of one more generation had to be allowed for within eight lines and hence the second line also consists of two king-names.

6. Each line from 2 to 6 of groups I and II, and, 3 to 6 of group III has only one king-name.[3]

7. The 7th line of group I does not have any king-name; whereas this line in groups II and III contains the name of one king as they had more genealogical matter to be accommodated within the traditional eight lines.

8. The last line always contains the name of the issuer.

9. In these seals the occurrence of the word *tasya,* between the word *putras* and the name of the king, starts from the name of Chandragupta II, i.e. line 4, and continues till the name of the issuer's father. The same formula occurs in the genealogy of the Bhitari pillar inscription of Skandagupta.[4]

1. See, appendix.
2. Here, however, it can be noted that the seal of Budhagupta, after restoration, has 34 and 37 letters in its first and second lines, respectively.
3. In the seal of Vishṇugupta one letter, *pta* of the name of Chandragupta (II) is written in the beginning of the 4th line which contains the name of Kumāragupta (II). Similarly the seal of Budhagupta has the last letter of the name of Ghaṭotkacha in its second line that contains the name of Chandragupta I.
4. *CII,* III, p. 53.

10. The word *tasya* does not occur twice in a line, with one exception, i. e. the 4th line of Vishṇugupta's seal which begins with the last letter of Chandragupta II's name as the seal had to accommodate more matter including the name of Kumāragupta; and as the word *tasya* occurs along with the king's name it is written at both places.

11. The word *tasya* follows the king's name.

12. The 7th line of group I does not contain any king's name and, therefore, the word *tasya* is absent in it. Also the 8th line of all the seals, since it contains the issuer's name, is devoid of the word *tasya*.

13. The phrase *Paramabhāgavata* is applied to the issuer only, except for Chandragupta II, since perhaps it was his special epithet.

14. The queen's name is given from Chandragupta I onwards but not prior to him.

15. The phrase *tat-pād-ānudhyāta* which comes after the words *tasya putras*, is followed by the word *Mahādevyāṁ* and the name of the queen.

16. The epithet *Mahādevyāṁ*[1] is written before the names of all the queens.

17. The honorific prefix *Śrī* before the name of the queen first appears on the seals with the mention of the wife of Purugupta and not with those of the preceding queens.

II

The seal of Budhagupta found from Nalanda is fragmentary. The lost left portion of the seal is more than half of the whole. The right part is complete. The extant part has been deciphered by Sastri.[2] At certain places he has tried to restore the original text. Ghosh[3] published the restored text of this seal on further scrutiny

1. From this is may be inferred that the queens or the wives of the kings mentioned in these seals were the chief queens.
2. *MASI*, 66, p. 64.
3. *IHQ*, XIX, pp 119 ff.

of the original. Therefore he differs at some places with Sastri's readings. Sircar,[1] relying on the decipherment of Sastri, and with the help of Narasiṁhagupta's seal, restored the missing letters of the left portion.

Sastri reads the first preserved letter of line 2 as *dau* whereas Ghosh correctly deciphers one more letter *vi* of *Lichchhavi* before *dau* of *dauhitrasya*. He also reads two more letters, *svayaṁ* at the right end of line 3, which are assigned by Sastri and Sircar to the lost left part of the 4th line. In the 4th line the first preserved letter is the part of the letter *Śrī*. Ghosh again rightly thinks that three letters '*sya-puttras*', deciphered by Sastri at the right end of line 6, does not exist there and that they were written in the beginning of the left lost part of the 7th line. Sircar rightly restores the honorific *Śrī* in this line between the word *Mahādevyāṁ* and the name of the queen, the wife of Purugupta, as it was characteristic to add this honorific to the name of the wife of Purugupta in all the other seals. But Ghosh does not include it in his restoration.

Sastri reads, in the extant line 7, *Mahādevyāṁ-utpannaḥ*. Sircar doubtfully accepts *mahā*, the first part of the word, as the name of the queen, and says that "we cannot be sure about the name of Budhagupta's mother, but she seems to be different from Chandradevī, mother of Narasiṁhagupta."[2] Of these, Sircar has identified 5 letters. Ghosh writes that "the name of the mother of Budhagupta occurring at the beginning of the extant portion of line 7 is not clearly legible; it consists of four letters, the first of which is either *cha* or *va* and the second is certainly *na* with some subscript mark or letter. The third and fourth letters clearly read *devyāṁ*."[3]

The extant part of this line has 7 letters. The first preserved letter of this line can not be made out and hence we feelthat its identification as *ma* or *cha* or *va* is merely a presumption. But the second letter seems to be *na* and not *ha*. And, therefore, on the basis of this letter, *na*, the name of the queen can be restored as Chandra. Thus it appears that Chandradevī was the mother not only of Narasiṁhagupta but also of Budhagupta.

1. *IHQ*, pp. 272 ff.
2. Ibid.
3. Ibid, 119 ff.

The letter *Śrī* of line 8 is rightly excluded by Ghosh from the group of letters restored by Sastri and Sircar, because it is faintly visible. Its preceding letter, *ja* also appears to be preserved.

The letters restored and deciphered by Ghosh and Sircar are shown in the following table :—

Line No.	Ghosh's Restoration			Sircar's Restoration		
	Restored letters	Deciphered letters	Total	Restored letters	Deciphered letters	Total
1	19	15	34	19	15	34
2	21	17	38	22	16	38
3	20	16	36	20	14	34
4	20	14	34	22	14	36
5	18	13	31	18	13	31
6	16	12	28	16	15	31
7	13	7	20	13	5	18
8	14	5	19	15	4	19
Total			240	Total		241

The number of preserved letters of the second line is 16 and not 17. The last letter *nna* does not exist there, and there is also no sufficient space between the conjunct *tpa* and the raised rim of the seal to presume its occurrence there.

In the extant line 3 a *visarga* – mark identified by the above scholars after the letter *nna* is conspicuously absent there and the conjunct that follows it is *ssva* and not *sva*.

In line 4 the last clear letter is conjunct *sta* (of *putras tat*) and between this and the raised rim, Sastri and Ghosh have accommodated five letters while the space in between them is not enough and only four letters could hardly have been inscribed there. Thus the restored letters of line 5 seem to be 19. The letters *sya puttra* of line 6 are correctly attributed by Ghosh to the beginning of line 7.

Thus this seal should have the following letters in each line :

1. [Sarvva – rāj – ochchhetuḥ pṛithivyām = apratirathasya Mahārāja*] – Śrī – Gupta – prapautrasya Mahārāja – Śrī – Ghaṭotka –

2. [cha – pautrasya Mahārājādhirāja – Śrī – Chandragupta – putrasya Lichchha*] – vi – dauhitrasya Mahādevyāṁ Kumāradevyām=utpa –

3. [nnasya Mahārājādhirāja – Śrī – Samudraguptasya putras=tat-pari*] – gṛihīto Mahādevyāṁ Dattadevyām= utpannas=svayaṁ

4. [ch = āpratirathaḥ Paramabhāgavato Mahārājādhirāja *] – Śrī – Chandraguptas = tasya putras=ta[t – pād – ānudhyā] –

5. [to Mahādevyāṁ Dhruvadevyām=utpanno Mahārājādhirāja *] – Śrī – Kumāraguptas=tasya putras=tat – pād – ā –

6. [nudhyāto Mahādevyām = Anantadevyām = utpanno Ma*] – hārājādhirāja – Śrī – Puruguptas=t –

7. [sya putras=tat – pād – ānudhyāto Mahādevyāṁ Śrī*] – [Cha]n[dra]devyām=utpannaḥ

8. [Paramabhāgavato Mahārājādhirā*] ja – Śrī – Budhaguptaḥ.

III

Only the seals of Kumāragupta (III), one from Bhitari and another from Nalanda, are found complete, and even then they have not been satisfactorily deciphered.

The 5th line of the Bhitari seal, in the view of Hoernle, ends in *–mahārā*[1] whereas in the Nalanda seal it terminates with *mahā*.[2] Therefore, Sastri[3] suggests them to have been issued by two different dies. Thus in view of the above scholar these two seals differ in lines 5 and 6. Sircar also holds that the 5th line of the Bhitari seal terminates with *mahārā*.[4]

Each of the first two lines of the Bhitari seal has 40 letters, therefore, the following table, starting with line 2, shows the arrangements of the letters of each line to see whether the letter *ra* occurs in the 5th line.

1. *JASB*, 1889, pt. 1, p. 89.
2. *MASI*, 66, p. 66.
3. Ibid, p. 65.
4. *Select Inscription*, 1965, p. 330.

	Left end	Right end
[1]	1 2 3 4 5 6 7 8 9 10	33 34 35 36 37 38 39 40
2.	rā jā dhi rā	rā jā
3.	× śrī sa mu dra gu pta	ga ×
4.	× va to ma hā rā jā	ma hā rā ×
5.	× × × jā dhi rā ja	ma hā × × ×
6.	× × × rā jā dhi rā	nno ma hā × × ×
7.	× × × × × rā jā dhi rā ja	mi tra de × × × × ×
8.	× × vya mu tpa	

Thus it is clear that the letter *ra* does not occur in the end of line 5 of Bhitari seal and this fully corresponds with the Nalanda seal. Hoernle reads the name of the queen in the 7th line as Śrīmatī. Fleet takes it as Mahālakshmī.[2] Although Sastri corrects it as Mitra,[3] here, however, we can note that the conjunct *tra* is not clear in the complete seals but in the broken seal of Kumāragupta it is spelt out as *ttra*.[4]

In the Nalanda seal, Sastri reads the letters *vyāṁ=utpannaḥ* in the end of the 7th[5] line but an examination of the illustration[6] shows that they actually occur in the 8th line. In the Bhitari seal, the 7th line also terminates with *Mittra de*. It may also be said here that the letter *ānuddhyāta* deciphered in the Bhitari seal[7] is read in the complete Nalanda seal as *ānudhyāta*.[8] But the illustrations of all the seals suggest it as *ānuddhyāta*.

Thus it is evident that all the seals of Kumāragupta III have the text in the same arrangement as follows :

1. Sarvva – rāj – ochchhettuḥ pṛithivyām=apratirathasya Mahārājā – Śrī – Gupta – prapauttrasya Mahārāja – Śrī – Ghaṭotkacha – pauttrasya Mahā –

1. *JASB*, 1889, p. 89.
2. *Ind. Ant.*, XIX, p. 225.
3. *MASI*, 66, p. 66.
4. Ibid, pl. VIII. no. e.
5. Ibid, p. 66.
6. Ibid, pl. VIII, nos. *e* and *d*.
7. *JASB*, 1889, p. 89; *Select Inscriptions*, 1965, pp. 329–30.
8. *MASI*, 66, p. 66.

2. rājādhirāja – Śrī – Chandragupta – puttrasya Lichchhavi – dauhittrasya Mahādevyāṁ Kumāradevyām=utpannasya Mahārājādhirāja –

3. [Śrī] – Samudraguptasya puttras=tat – parigṛihīto Mahādevyāṁ Dattadevyān=utpannas=svayaṁ cha=āpratirathaḥ Paramabhāga –

4. [vato] Mahārājādhirāja – Śrī – Chandraguptas = tasya puttras=tat – pād – ānuddhyāto Mahādevyāṁ Dhruvadevyām=utpanno Mahārā –

5. jādhirāja – Śrī – Kumāraguptas=tasya puttras=tat – pād – ānuddhyāto Mahādevyām = Anantadevyām = utpanno Mahā –

6. rājādhirāja – Śrī – Puruguptas=tasya puttras=tat – pād – ānuddhyāto Mahādevyāṁ Chandradevyām = utpanno Mahā –

7. rājādhirāja – Śrī – Narasiṁhaguptas=tasya puttras=tat – pād – ānuddhyāto Mahādevyāṁ Śrī – Mittrade –

8. vyām=utpannaḥ Paramabhāgavato Mahārājādhirāja – Śrī – Kumāraguptaḥ.

IV

One broken triangular Gupta seal[1] contains no proper name except one in the last line, which is read by Hiranand Sastri as Vainyagupta. He attributes it to the king of the same name known from the Gunaighar inscription.[2]

The preserved portion of the seal under discussion has been read by Sastri[3] and myself.[4] Its corrected reading is as follows :

1. ......*guptas=tasya putra[s]=ta*[5]........

2. ......*s=tasya putras=tat – pād – ānudhyātaḥ Śrī*........

1. *MASI*, 66, p. 67.
2. *IHQ*, VI, pp. 53 ff.
3. *MASI*, 66 p. 67.
4. *JNSI*, XXIX, pt. I, p. 44.
5. It is bracketed by Sastri (*MASI*, 66, p. 67). But it is well clear (ibid, pl. VIII, *f*)

3. ......*guptas=tasya*[1] *putras=tat-pād-ānudhyāto Mahādevyāṁ Śrī*.........

4. – *Paramabhāgavato Mahārājādhirāja[ḥ] Śrī-Vainyaguptaḥ*.[2]

The present seal has only four lines but fortunately enough the fourth line is complete and contains the name of the issuer which shows that this was originally the last or 8th line of the 'royal seal.' Hence the preceding lines 1, 2 and 3 naturally should be concurrent with lines 5, 6 and 7. Thus this seal preserves only half of the legend. In the extant four lines the following numbers of letter occur:

Line	–	(1.)	Letters	Lost
,,	–	(2.)	,,	,,
,,	–	(3.)	,,	,,
,,	–	(4.)	,,	,,
,,	1	(5.)	6	Preserved
,,	2	(6.)	11	,,
,,	3	(7.)	17	,,
,,	4	(8.)	19	,,

In this seal the word *tasya* occurs in the lines 1 (5), 2 (6) and 3 (7). Now, as the 7th line contains this word evidently the seal would not belong to the first group.

However, it is really very difficult to say what names were written in lines 2 (6) and 3 (7). Sinha[3] suggests that Vainyagupta was the son of Budhagupta whereas Goyal[4] holds that he was the son of Chandragupta III and the grandson of Budhagupta. Thus according to Sinha, the lines 2 (6) and 3 (7) of the seal should contain the names of Purugupta and Budhagupta, respectively; where as if the latter observation is held, we have to assume that the above lines had the names of Budhagupta and Chandragupta, respectively. To arrive at a definite conclusion, we propose to restore this seal by means of statistical method.

1, Sastri read it as *guptasya* (*MAI*, 66, p. 67) but I corrected it as *guptas=tasya* (*JNSI*, XXIX, pt. I, p. 44).

2. Sometime back, I pointed out that this personal name taken by scholars as 'Vainya' should be read as Chandra (*JNSI*, XXIX, pp. 44–45) but the text-restoration of this seal makes me to favour the earlier reading.

3. Sinha, B. P., *The Decline of the Kingdom of Magadha*, p. 98, and fn. 4.

4. Goyal, S. R., *A History of the Imperial Guptas*, p. 374.

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The line 4 (8) of this seal has 19 letters. The line 3 (7) contains 17 extant letters. The letter *pu* of the word *putras* in this line is engraved a little above *va* of the word *Bhāgavata* of the last line. In Kumāragupta's seal between the words *Narasiṁhaguptas – tasya* and *Paramabhāgavato,* 20 letters occur. To the right of the letter *va* of the last line of the present seal 13 letters exist whereas there are only 12 letters in the preceding line following the letter *pu*. This shows the occurrence of 1 more letter in this line over the conjunct *pta* of the last line. Thus the total number of letters from the letter *pu* of the line 3 (7) over the letters of the bottom line is 12+1+1 (the letter *pu*)=14. Thus there should be 6 letters 20 – 14=6 outside the bottom line. Similarly four letters precede *pu* while before *va* of the last line five letters are inscribed. Therefore the left side would also have one letter over the first letter of the bottom line and six letters to keep the balance at the right side. Thus the total number of the letters of this side, preceding the letter *pu,* would be 4+6+1=11. The total number of the letters in the entire line should be 11+20=31.

Between the word *tasya* of line 6 and *puttras* of line 7 of the seal of Kumāragupta III, 36 letters occur. However, it may be mentioned that in line 2 (6) after the word *pād – ānudhyātaḥ,* by omitting the word *Mahādevyāṁ,* the honorific *Śrī* is written, therefore, 4 letters may be excluded here. Thus the letters from *pu* of line 2 (6) and before *pu* of line 3 (7) would have a total of 32 letters (36 – 4=32). It may also be pointed out that the name of Narasiṁhagupta comprises of four letters and, as the evidence stands, he was not the father of the issuer; but the number of the letters of the Gupta kings' names vary from two to four, and, therefore, in absence of certainty regarding the issuer's father, as it is difficult to find out the exact number of the letters of his name, the number 4 may be retained.

In line 2 (6), the letter *pu* is inscribed exactly over the same letter of line 3 (7) and therefore the remaining 32 – 11=21 letters would have been written at the right of the above letter. As the right end of this line probably contained one more letter from the right end of the lower line, the left side would also have had one more letter. Hence the total number of letters preceding *pu* seems to have been 11+1=12. Thus the total number of the letters of line 2 (6) should be 21+12=33.

From the letter *pu* of line 5 to the word *tasya* of line 6 of the Kumāragupta's seal, 34 letters are engraved. Only 12 letters out of 34 appear to have been inscribed in line 2 (6) of the seal and the remaining 22 in line 1 (5). The letter *pu* in this line does not occur over the same letter of line 2 (6). The letter inscribed in line 1 (5) over *pu* of line 2 (6) is *gu* of *guptas* and therefore, from this letter, 26 letters would have occurred at the right side of this line. As at the right end there would be 5 more letters from the terminating point of line 2 (6), the left end would also contain a similar number of letters. Therefore, this side would consist of 17 letters (12+5=17). Thus the total number of letters of line 1 (5) would be 26+17=43.

The total number of letters from the beginning of the inscription before the letter *gu* of the 5th line of Kumāragupta's seal is 164. Among them 17 letters would be written before *gu* in line 5. Therefore the remaining 164 – 17=147 letters have to be distributed in the upper four lines, from 1 to 4. These 147 letters, if distributed into four lines, each line may tentatively have 37, 37, 37 and 36 letters, respectively. Thus this seal should tentatively have had the following numbers of letters in each line after restoration :—

Line	1.	Letters	37
,,	2.	,,	37
,,	3.	,,	37
,,	4.	,,	36
,,	5.	,,	43
,,	6.	,,	33
,,	7.	,,	31
,,	8.	,,	19

This presents a problem which needs considerations. In this restoration scheme the inscription of this seal must have exhibited a rhmboid shape, whereas on the other seals it generally has the tapering shape. Therefore it is likely that the personal name of the issuer's father in the line 3 (7) of this seal comprises of two letters and between the word *tasya* of line 2 (6) and *putras* of line 3 (7) the total number of the letters is 32 – 2=30. Of these, 11 letters are inscribed in the line 3 (7). These 30 – 11=19 are engraved at the right side of the line 2 (6) from the letter *pu.* We also know that one *visarga* is inserted between these letters. Hence these letters extend up to the

last letter of the right end of the line 3 (7). The letter *pu* of the line 2 (6) occurs over the same letter of the line 3 (7) and, therefore, to maintain the balance, the left side, preceding this letter, would also have 11 letters. Between the word *tasya* of line 1 (5) and *putras* of line 2 (6), 34 letters occur and, if, among them, 11 letters are inscribed in the line 2 (6), the remaining 34 – 11 = 23 letters would have been engraved to the right of the line 1 (5). But we also note that the letter inscribed in line 1 (5) over *pu* of line 2 (6) is *gu* of *guptas* and therefore, from this letter, 23+4=27 letters appear to have been engraved at the right side. As this side had seven more letters, the left side also might have had seven more letters. Thus this line seems to have 7+11+27=45 letters.

Out of 164 letters, which were written before *gu* of the 5th line, as 18 letters would have been inscribed in the 5th line, while the remaining 146 letters have to be distributed in the upper four line, from 1 to 4, as 38, 36, 36 and 36. Thus we arrive at the following alternative arrangement of letters in its each line :—

Line	1.	Letters	38
,,	2.	,,	36
,,	3.	,,	36
,,	4.	,,	36
,,	5.	,,	45
,,	6.	,,	30
,,	7.	,,	41
,,	8.	,,	19

Again this restoration of the text also represents a rhmboid shape of the inscription which is unusual. Therefore, it seems that this seal belonged to the third group of the genealogical seals. And, on this account, we have to add here the matter of one more generation that contains 34 letters. Thus 146+34=180 letters appear to have occurred in the upper four lines. These letters, dividing by four, come to 45 in each line. Hence, in each line of the seal, the total number of the letters must have been as follows :—

Line	–	1.	Letters	45
,,	–	2.	,,	45
,,	–	3.	,,	45
,,	–	4.	,,	45
,,	(1)	5.	,,	45
,,	(2)	6.	,,	30
,,	(3)	7.	,,	31
,,	(4)	8.	,,	19

The line 3 (7) begins with the words *guptas-tasya*. Preceding it was the name of a king. Majumdar,[1] by using a powerful lens, found "a sign of a hook-like curve open to the left at the bottom level of the line", which is taken by him as an *ukāra*. Therefore he thinks that the name of the issuer's father "must have ended in *u*." There are two Gupta kings, Puru and Vishṇu whose names terminate with *u*. But against the identification with Vishṇugupta he writes that "as *Shṇ* is a conjunct consonant, *u-kāra* sign would naturally be much below the bottom level of the next letter, as is actually the case in the seal of Vishṇugupta himself. Here, however, the *u-kāra* sign is a little above the bottom level of the next letter." This seal belongs to the third generation from Purugupta and therefore the issuer of this seal may not be regarded as the son of Purugupta. The surmise of Sinha, that Vainyagupta was the son of Budhagupta, is also unwarranted since this line seems to have contained the name of the second generation and not that of the first generation from Purugupta. Therefore Chandragupta (III) may be taken as the name of the issuer's father. In this case 'a sign of a hook-like curve open to the left' can be considered as the stroke of *r*. It can also be possible to regard Vainyagupta as the grandson of Budhagupta.

However, one discrepancy may be pointed out in the line 2 (6) of this seal. In all the seals, after the phrase *tāt – pād – ānudhyātaḥ* or *ānudhyāta*, occur the epithet *Mahādevyāṁ* and then the name of the queen. But in this seal the prefix *Śrī* is written after the legend *tat-pād-ānudhyātaḥ*. Here the problem is whether the epithet *Mahādevyāṁ* before the name of the queen is dropped deliberately and replaced only by simple honorific *Śrī* or it was written before *Mahādevyāṁ* instead of after, though the latter alternative is highly improbable.

This peculiarity is also noted by Majumdar[2] but he writes that the possibility of *Mahādevyāṁ* after *pād – ānudhyātaḥ* "is excluded by the *visarga* instead of *o–kāra* in the word *pādānudhyātaḥ*. It is just possible that here the name of the Mahādevī is omitted and the name of the king was inserted." But he himself rightly adds that "even in that case, we should expect the word *Mahārājādhirāja* before *Śrī*." It must also be mentioned that the appearance of a king's name after *pādānudhyātaḥ* is an unusual phenomenon of the Gupta seals.

1. *IHQ*, XXIV, p. 67.
2. Ibid.

However, on the besis of the statistical analysis, the present seal may be restored tentatively as follows :

1. [sarvva – rāj – ochchhetuḥ pṛithivyām = apratirathasya Mahārājā – Śrī – Gupta – prapautrasya Mahārāja – Śrī – Ghaṭotkacha – pautrasya Mahārājādhirāja –
2. Śrī – Chandragupta – putrasya Lichchhavi – dauhitrasya Mahādevyāṁ Kumāradevyām=utpannasya Mahārājādhirāja – Śrī – Samudraguptasya putras = ta –
3. t – parigṛihīto Mahādevyāṁ Dattadevyām=utpannas=svayaṁ ch = apratirathaḥ Paramabhāgavato Mahārājādhirāja – Śrī Chandraguptas=tasya pu –
4. tras=tat – pād – ānudhyāto Mahādevyāṁ Dhruvadevyām =utpanno Mahārājādhirāja – Śrī – Kumāraguptas=tasya putras=tat – pād – ānudhyāto Mahādevyā] –
5. [m=Anantadevyām = utpanno Mahārājādhirāja – Śrī – Puru*] guptas = tasya putras = ta [t – pād – ānudhyāto Mahādevyāṁ Śrī – Chandradevyām = utpanno Mahārā*] –
6. [jādhirāja – Śrī – Budha(?)gupta*]s=tasya putras=tat – pād – ānudhyātaḥ Śrī [– – devyām=utpanno Mahārā –]
7. [jādhirāja – Śrī – Chandra (?)*] guptas=tasya putras= tat – pād – ānudhyāto Mahādevyāṁ Śrī [– – devyām= utpannaḥ]
8. Paramabhāgavato Mahārājādhirāja – Śrī – Vainyaguptaḥ.

V

The fragmentary seal of Vishṇugupta, which has a triangular shape, consists of about a quarter of the original seal. The preserved lines have been read by Krishna Deva as follows[1]:—

1. ....hārājādh[i]r[ā] ja – Śr[ī*] – [P*]ū......
2. .....h[a*]r[ā*] j[ā]dhirāja – Śrī – Narasiṁha[guptas]=tasya puttras=tat – pādānuddh[yā]t[o]
3. .....rājādhirāja – Śrī – Kumāraguptas = tasya puttras=tat – pādānuddhyāto Ma[hā]
4. .....nnaḥ = Paramabhāgavato Mahārājādhirāja – Śrī – Vishṇug[u] [ptaḥ*]

1. *EI*, XXVI, pp. 235-9.

Thus it is clear that lines 1 to 4 of the present seal stand for lines 5 to 8 of the original seal. This piece preserves the part of the issuer's pedigree, the names of his father Kumāragupta and grandfather Narasiṁhagupta.[1] The legend of this seal may be restored with the help of Kumāragupta's seals.

The number of surviving letters in these lines are as follows :

Line	–	(1)	Letters Survived	
,,	–	(2)	,,	×
,,	–	(3)	,,	×
,,	–	(4)	,,	×
,,	1.	(5)	,,	× 7 ×
,,	2.	(6)	,,	× 23
,,	3.	(7)	,,	× 23
,,	4.	(8)	,,	× 20

The preserved portion of line 4 (8) begins from *nnaḥ*. The right end of line 3 (7) has the letters *mahā*. In between these occur 6 letters,[2] – *devyāṁ* – – *devyām* – *utpa*, and the name of the queen. Though the name of the queen inscribed in this line is unknown from any other source, presuming that the name of the Vishṇugupta's mother also was of the two letters like the names of the most queens of this dynasty we can add two letters for this. It is a characteristic of the seals that the honorific *Śrī* is added to the name of every queen right from the wife of Purugupta till the issuer's mother. Therefore, it appears that only 9 letters at the left end of the line 4 (8) have been lost. The preserved letters are 20 in number. Thus this line had 9+20= 29 letters.

The letter *ra* of Kumāragupta in line 3 (7) and the letter *ra* of Narasiṁhagupta in line 2 (6) are written one exactly above the other. In the seals of Kumāragupta, excluding the word *Parama-bhāgavata*, between *ra* of Narasiṁhagupta and *ra* of Kumāragupta, occur 36 letters. Of these, 14 letters are inscribed at the right of the

1. Goyal feels that Narasiṁhagupta and Kumāragupta mentioned in this seal are different from their name sakes known from the seals, referred to above, of Kumāragupta (op. cit.). I do not subscribe to this view. I shall discuss it in detail elsewhere.

2. Only in the case of writing the name of Anantadevī 9 letters occur in between the letters *mahā* and *nnaḥ*.

letter *ra* of line 2 (6). The right end of the line is unbroken, and therefore it appears that only 36 – 14=22 letters were written to the left of the letter *ra* of line 3 (7). Of these, 8 letters are present on the seal at the left of the letter *ra* of line 3 (7). Therefore it is evident that only 22 – 8=14 letters of the left end of the line 3 (7) have been lost. Thus this line had 22+1+14=37 letters.

Both ends of line 1 (5) are damaged and therefore it may not be said with certainty how many letters have been lost at the left end of the line 2 (6). This line at the right of the letter *ra* has also 14 letters in the same way as line 3 (7). Line 3 (7) at the left of the letter *ra* has 22 letters. Therefore, it is not unlikely that line 2 (7) at the left of *ra* had the same number of letters to keep the balance. Of these only 8 letters are preserved. Therefore, 22 – 8=14 letters seem to have gone along with the broken part of the seal. Thus it appears that this line had 22+1+14=37 letters in all.

In line 1 (5), the letter *ra* of *dhirāja* is nearly over the *ra* of *Narasiṁha* of line 2 (6). Between these letters, 37 letters are composed on the seals of Kumāragupta III. Of these probably 22 letters were written at the left of the letter *ra* of *Narasiṁhagupta* in line 2 (6). Therefore, it is clear that only 15 (37 – 22) letters were written at the right of the letter *ra* of *dhirāja* in line 1 (5). As the right side has one additional letter from the lower two lines, the left side, too, would have one more letter to maintain the systematic arrangement of letters. Thus it appears that this line had 22+1+1+15=39 letters.

The study of all the seals show that from the beginning and before *ra* of *dhirāja,* which is inscribed before *Purugupta,* there are 193 letters. Among them 23 letters seem to have been written at the left of the letter *ra* of *dhirāja.* Therefore the remaining 193 – 23= 170 letters would have been inscribed in the four missing lines of the upper part of this seal. These letters, divided into 4 lines, come to 42, 42, 42 and 44 in each respectively. The line 1 (5) had 39 letters. Generally two or four letters and not one or three were added to keep the symetrical shape of the characters. Therefore, the lines four to one, may have 39, 41, 45 and 45 numbers of letters respectively. The second arrangement seems to be more probable.

Thus, the present seal may be restored as follows :

1. [Sarvva – rāj – ochchhettuḥ pṛithivyām=apratirathasya Mahārāja – Śrī – Gupta – prapauttrasya Mahārāja – Śrī – Ghaṭotkacha – pauttrasya Mahārājādhirāja –

2. Śrī – Chandragupta – puttrasya Lichchhavi – dauhitrasya Mahādevyāṁ Kumāradevyām=utpannasya Mahārājādhirāja – Śrī – Samudraguptasya puttras=ta –

3. t – parigṛihīto Mahādevyāṁ Dattadevyām=utpannas=svayaṁ ch=āpratirathaḥ Paramabhāgavato Mahārājādhirāja – Śrī – Chandragu –

4. – ptas = tasya – puttras=tat – pād – ānuddhyāto Mahādevyāṁ Dhruvadevyām=utpanno Mahārājādhirāja – Śrī – Kumāraguptas=tasya puttra –

5. s=tat – pād – ānuddhyāto Mahādevyām=Anantadevyām=utpanno – Ma*]hārājādhir[ā]ja – Śr[ī*] – [P*]ū[ruguptas=tasya puttras=tat – pād – ānuddhyā – *]

6. [to Mahādevyāṁ Śrī – Chandradevyām=utpanno Ma*]h [ā*] r [ā*] j [ā] dhirāja – Śrī – Narasiṁha [guptas] =tasya puttras=tat – pād – ānuddh[yā]t[o]

7. [Mahādevyāṁ Śrī – Mitradevyām=utpanno Mahā*]rājādhirāja – Śrī – Kumāraguptas=tasya puttras=tat – pād – ānuddhyāto Ma[hā–]

8. [devyāṁ Śrī – – devyām=utpa*]nnaḥ Paramabhāgavato Mahārājādhirāja – Śrī – Vishṇug[u]p[taḥ].

APPENDIX

Restored Text of Narasiṁhagupta's Seal[1]

1. [Sarvva – rāj – ochchhetuḥ pṛithi*]vyām=apratirathasya Mahārāja – Śrī – Gupta – prapautrasya Mahārāja – Śrī – Ghaṭotkacha – pau –

1. *IHQ*, XIX, p. 274.

2. [trasya Mahārājādhirā*]ja – Śrī – Chandragupta – putrasya Lichchhavi – dauhitrasya Mahādevyāṁ Kumāradevyām= utpanna –

3. [sya Mahārājādhirā*]ja – Śrī – Samudraguptasya putras= tat – parigṛihīto Mahādevyāṁ Dattadevyām=utpanna –

4. [s=svayaṁ ch=āpratiratha*]ḥ Paramabhāgavato Mahārājādhirāja – Śrī – Chandraguptas=tasya putras = tat – pād – ānu –

5. [dhyāto Mahādevyāṁ*] Dhruvadevyām=utpanno Mahārājādhirāja – Śrī – Kumāraguptas=tasya putras=tat – pā –

6. [d - ānudhyāto Ma*]hādevyām=Anantadevyām=utpannaḥ Mahārājādhirāja – Śrī – Puruguptas=tasya pu –

7. [tras=tat – pād – ānudhyāto*] Mahādevyāṁ Śrī – Chandradevyām=utpannaḥ Paramabhāga –

8. [vato Mahārājādhirā*]ja – Śrī – Narasiṁhaguptaḥ.

TABLE 1

Showing the occurrence of the number of king's names in the each line of the seals of various groups.

Lines	Groups		
	I	II	III
1	××	××	××
2	×	×	××
3	×	×	×
4	×	×	×
5	×	×	×
6	×	×	×
7	—	×	×
8	#	#	#

× One king's name.

— Non-occurrence of king-name.

Issuer's name.

TABLE 2

In this table the number of the letters of the restored and corrected readings in the each line of the seals of Budhagupta, Narasiṁhagupta, Kumāragupta III, Vainyagupta and Vishṇugupta is given.

	Budha-gupta	Narasiṁha-gupta	Kumāra-gupta III	Vainya-gupta	Vishṇu-gupta
1.	34	36	40	45	45
2.	37	36	40	45	45
3.	37	34	38	45	41
4.	33	34	38	45	39
5.	32	32	34	45	39
6.	28	31	34	30	37
7.	21	24	30	31	37
8.	19	16	24	19	29
Total	241	243	278	305	312

ERRATA

Page	Line	Read	For
49	5	Svayaṁ=ch	Svayaṁ=cha
,,	14	Mahādevyāṁ	Mahādevyaṁ
		Śrī – Chandradevyām	Chandradevyām
55	10	āpratirathaḥ	apratirathaḥ

THREE HOARDS OF CHINESE COINS IN MADRAS GOVERNMENT MUSEUM

N. Sankara Narayana

From very early times there was contact between India and China. The ancient routes taken by the Indians to China and by the Chinese to India are still a matter of controversy. But from the researches conducted by scholars it can be presumed that there was contact between India and China both through land routes and sea routes.

China is known in Indian Literature as China. The *Mahābhārata* uses the term in its reference to China. Mention is made of *Chīnabhūmi* and *Chīnopaṭṭa* in the *Arthaśāstra* of Kauṭilya.

With the opening of trade and trade routes, the Buddhist missionaries of India left the Indian shores to spread their faith in far-off lands. The religion introduced in China was the Mahāyāna School of Buddhism which is different from Hīnayāna, which was more popular in South India and Ceylon. The Mahāyāna Buddhism became the dominant religion of China. Some of the Chinese missionaries had an urge to come on a pilgrimage to India and study the religion in the land of its birth.

While this was happening in the early centuries of the Christian era, the trade and political contacts between south India and China started. The arrival of the South Indian monk Bodhidharma in the year 520 A. D. in China was an important land-mark in the contact between South India and China. Bodhidharma was accorded a royal welcome by the Emperor Liang Wu in Nanking. What is more significant is his contribution to Chinese Buddhism.

The Next important person of South India who visited China was Bodhiruchi. After twelve years of strenuous work, Bodhiruchi called on the Chinese Emperor in his capital in 701 A. D. Much

information about the contact between India and China can be gleaned from the accounts left by the Chinese chroniclers like Fa-Hien, Hiuen Tsang and I-Tsing.

The cultural relations were not confined to religion alone. Even in the sphere of fine arts, particularly South Indian music, Chinese influence is of considerable importance. Among the musical instruments of South India, *jalataraṅgam,* literally meaning, 'water waves' is one. South India appears to have influenced China in architecture to a considerable extent. According to Sulayman, the walls of the Chinese buildings were of wood. He writes that the people of Hind had a profound knowledge of stone, plaster and brick as the materials used in the construction of buildings. From the accounts of Sulayman it may be presumed that the Chinese gave up their wooden structure and started constructing solid buildings after the South Indian fashion.

Diplomatic relations between South India and China also constitute an important phase of Sino-Indian contact. The contact was during the time of the Pallavas of Kāñchī. Chinese accounts are the primary source on this aspect. But the accounts differ from one another in detail. According to Ma Twan-lin, it was about 667 A. D., that the five kingdoms of India sent ambassadors to the court of the Chinese Emperor. It is stated in another account, that it was in the year 692 that the kings of Eastern, Western, Southern, Northern and Central India visited the court of China. Still according to another account, an embassy was sent from South India in the year 710 in the reign of the Emperor Joei Tsong.

There are two important Chinese literary records called *Kieu T'ang Shu* and *Ts'o fu Yuan Kuei.* The latter is a cyclopaedia of about 1013 A. D., which throws light on the diplomatic relations of a certain Pallava king who is called She-li Na Lo Seng Kia (Srī Narasiṁha) and also Sheli-Na-Lo-Seng-Kia-Pao-To-Pa-Mo (Srī Narasiṁha—potavarman). The Chinese annals, particularly Chau Ju-Kua, record three embassies sent during different periods by the Chola kings. One was during the reign of Rājaraja I, in the year 1015. The next embassy was sent by Rājendra I in the year 1033 A. D. The third and the most important was during the time of Kulotuṅga I in 1077 A. D. These Chola embassies were more in the nature of trade relations rather than cultural contacts.

There was brisk trade between South India and China. According to Pan Kou, there was intercourse between South India and China even in 2nd century B. C., if not earlier. The Chinese merchants visited Kāñchī (Conjeevaram) and with the help of local men they went by sea and brought pearls, glass, rare stones and other products not available in China and in exchange they gave gold and silks. Vessels from the ports of the west coast and the east coast of the Indian peninsula bound for China often took the sea route. On the west coast the principal ports were Quilon, Monte de Ely and Calicut. On the side of the Bay of Bengal, among other ports, Puhar or Kāverīpaṭṭinam at the mouth of the river Kāverī near the present Mayuram of Tanjore district was an active trade centre. Fei Hsin (1346 A. D.) furnishes a list of articles in which trade was carried on. They included gold, silver, coloured satins, blue and white porcelain, beads, musk, camphor etc. Ma Huan, a Muslim Chinaman, who was attached as interpreter to the suite of Cheng Ho, visited South India. According to him, when a ship arrived from China to Calicut, the king's oversear and a *chitti* (modern Chetty) went on board and made an invoice of the goods.

The discovery of Chinese coins in large numbers in India particularly South India corroborates the commercial contact between South India and China. Chinese coins were discovered in considerable number in South India. Three hoards of Chinese copper coins have been found in Tamil Nadu and they are now in the Madras Museum and it is interesting to note that all these three hoards are from the Tanjore district.[1] This emphasises the presumption that Puhar or Kāverīpaṭṭinam, the Chola port must have played an important role as the channel for this trade with China. The first hoard is from Vikram village in Pattukottai taluk and consists of 20 coins. The earliest specimens of this hoard belong to the Kai Yuan's reign (713–742 A. D.) and the latest to that of Kai Hi (1237–1241 A. D.). The second hoard consisting of 1822 coins has come from Thallikottai village in Mannargudi taluk. In this hoard, coins of all successive reigns upto that of Ching Tin (1260–68 A. D.) are represented. The third hoard of 323 Chinese coins which was found recently in Olayakunnam village of Pattu-

1. Besides Tanjore in Tamil Nadu, Chinese coins were also discovered at Sirpur and Chandravalli.

kottai taluk of Tanjore district is of great significance because this hoard has yielded coins which go back to 142 B. C. and 126 B. C. These coins have been sent to the China Bhavan of Viswa Bharati, Santiniketan, for examination. They were examined and classified by Prof. Tan Yun Shau and his wife. The classified list prepared by them is given here as follows.[1]

Category	Name of the Coin	Date of Coinage	Period of Circulation
1	San-chu (Three chu)[2]	B. C. 142	B. C. 142-125
2	Wu-chu (Five chu)	First issued by the Han Emperor Wu in B. C. 126 and later by the subsequent rulers of Han, Wei, Tsin, Ch'en, Hou-Wei, Pei-ch'i, Hou-Chou etc.	B. C. 126-620 A. D.
3	K'ai-Yuan-t'ung-Pao (Treasure of the K'ai-Yuan Etc.)	621 A. D.	621 A. D.–665 A. D.
4	Sung - Yuan t'ung - Pao (Treasure of Sung dynasty)	960 A. D.	960-975 A. D.
5	T'ai-Ping T'ung Pao (Treasure of the T'ai-P'ing era)	976 A. D.	976-983 A. D.

1. "Cash : Chinese Coins of copper alloy, with a large hole in the middle so they can be strung on a thread; ....The Chinese word is from the Tamil *kas*, a small Indian coin. The name given to the coin in China is *tsien*" (C. C. Chamberlain, *Teach Yourself Numismatics*, The English University Press Ltd., London, E. C. I., p. 21).

2. A Chu is twenty fourth part of a tael, equivalent to the weight of one hundred grains of millet.

1	2	3	4
6	Ch'un-hua Yuan-Pao (Treasure of the Ch'un Hua era)	990 A. D.	990-994 A. D.
7	Chih-tao - Yuan-Pao (Treasure of the Chih-tao era)	995 A. D.	995-997 A. D.
8	Hsien - P'ing - Yuan-Pao (Treasure of the Hsien-P'ing era)	998 A. D.	998-1003 A. D.
9	Ching-leh -Yuan-Pao (Treasure of the Ching-leh era)	1004 A. D.	1004-1007 A. D.
10	Hsiang-fu-Yuan-Pao (Treasure of the Hsiang-fu era)	1008 A. D.	1008-1010 A. D.
11	T'ien-hsi t'ung-Pao (Treasure of the T'ien-hsi era)	1017 A. D.	1017-1021 A. D.
12	T'ien-Sheng Yuan Pao (Treasure of the T'ien-Sheng era)	1017 A. D.	1017-1021 A. D.
13	Mīng-tao Yuan-Pao (Treasure of Mīng Tao era)	1032 A. D.	1032-1033 A. D.
14	Ching-Yu Yuan Pao (Treasure of Ching-Yu era)	1034 A. D.	1034-1037 A. D.
15	Huang Sung-T'ung Pao (Treasure of the Imperial Sung dynasty)	1023 A. D.	1023-1040 A. D.

1	2	3	4
16	Chih-ho Yuan Pao (Treasure of the Chih-ho era)	1054 A. D.	1054-1055 A. D.
17	Chia-Yu-Yuan - Pao (Treasure of the Chia-Yu era)	1056 A. D.	1056-1063 A. D.
18	Chih P'ing Yuan Pao (Treasure of the Chih P'ing era)	1064 A. D.	1064-1067 A. D.
19	Hsi-ning Yuan-Pao (Treasure of the Hsi-ning era) Hsi-ning Chung-Pao (Heavy treasure of the Hsi-ning era)	1068 A. D.	1068-1077 A. D.
20	Yuan - teng - t'ung Pao (Treasure of the Yuan teng era)	1078 A. D.	1078-1085 A. D.
21	Yuan Yu t'ung pao (Treasure of the Yuan Yu era)	1086 A. D.	1086-1093 A. D.
22	Shao-Sheng Yuan-pao (Treasure of the Shao-Sheng era)	1094 A. D.	1094-1097 A. D.
23	Yuan-fu t'ung-Pao (Treasure of the Yuan-fu era)	1098 A. D.	1098-1100 A. D.
24	Sheng - Sung Yuan Pao (Treasure of the sacred Sung dynasty)	1101 A. D.	1101-1102 A. D.

1	2	3	4
25	Ta Kuan-t'ung Pao (Treasure of the Ta Kuan era)	1107 A. D.	1107 A. D.– 1110 A. D.
26	Cheng-ho t'ung Pao (Treasure of the Cheng-ho era)	1111 A. D.	1111-1117 A. D.
27	Hsuan-ho t'ung-pao (Treasure of the Hsuan-ho era)	1119 A. D.	1119-1125 A. D.
28	Chien-yen t'ung Pao (Treasure of the Hsuan-ho era)	1127 A. D.	1127-1130 A. D.
29	Shao - hsing Yuan-pao (Treasure of the Shao-hsing era) Shao - hsing t'ung-Pao (Treasure of the Shao-hsing era)	1131 A. D.	1131-1162 A. D.
30	Ch'un-hsi Yuan-pao (Treasure of the Ch'un-hsi era)	1174 A. D.	1174-1189 A. D.
31	Shao-hsi Yuan-pao (Treasure of the Shao-hsi era)	1190 A. D.	1190-1194 A. D.
32	Ch'ing-yuan t'ung-pao (Treasure of the Ch'ing-yuan era)	1195 A. D.	1195-1200 A. D.
33	Chia-t'ai t'ung-pao (Treasure of the Chia-t'ai era)	1201 A. D.	1201-1204 A. D.

1	2	3	4
34	K'ai-hsi T'ung-pao (Treasure of the K'ai-hsi era)	1205 A. D.	1205-1207 A. D.
35	Chia-ting t'ung-pao (Treasure of the Chia-ting era)	1208 A. D.	1208-1224 A. D.
36	Shao-ting t'ung-pao (Treasure of the Shao-ting era)	1228 A. D.	1228-1233 A. D.
37	Ch'un-yu Yuan-pao (Treasure of the Ch'un-yu era)	1241 A. D.	1241-1252 A. D.

AN ENIGMATIC COIN IN THE INDIAN MUSEUM CABINET

Vasant Choudhury & Parimal Ray

A small silver coin in the Indian Museum Cabinet has been the bone of contention among leading numismatists duing the last sixty years. There has been a medley of readings by various experts each offering a different argument to support his standpoint.

The coin under discussion was first published by Smith during the year 1906 A. D.[1] In consultation with E. Hultzsch Smith read the obverse legend as "*Śaśaka gu | ......chi | tta devaḥ*" and tentatively assigned the coin to Vishṇu Chitta Deva of Kadamba Dynasty of Goa. The name of the king was not fully deciphered and the date was read as "1147–about 1185 A. D."

R. D. Banerji[2] stated that B. B. Bidyabinod, Assistant Curator, Archaeological Section, Indian Museum, first of all noticed the mistake in the *Catalogue*. The legend on the coin being in ancient Bengali characters, Smith and Hultzsch found it difficult to read it. Banerji initially read the legend in question as "*Guṇagovindadeva*"; but Bidyabinod interpreted the reading as "Gurugovindadeva",[3] which Banerji accepted. On the strength of this reading Banerji proceeded to identify Gurugovinda as Gaur Govinda, the last king of Sylhet in Eastern Bengal. Moreover, Banerji noticed the fabric-wise similarity of this coin with the coinage of Tippera and regarded it as a quarter rupee accordingly. He read the date of the coin as 140 (?) 2 Śakabda and finally interpreted as Ś. 1402= 1480 A. D.

1. *IMC,* I, p. 314, pl. XXX, no. 6.
2. *NS,* XXXIII, pp. 86-7.
3. *SIMC,* I. p.

Soon after N. K. Bhattasali[1] discussed the said quarter rupee and read the obverse legend as "*Śrīśrīyu / ta Govi / nda Devaḥ.*" He assigned the coin to "one of Govinda Māṇikya of Tippera." According to him "there is a dagger-like perpendicular stroke between the second *śrī* and *yu,* which is very probably the trident of Śiva." The Śaka era on the reverse of the coin as read by Bhattasali is 15+1. He pointed out the small cross or four-pointed star, which appeared in the third unit of Śaka era, stands for the Bengali numerical unit 'eight' and substantiated his standpoint by referring to the first page of "*Śrī Kṛishṇa Kīrtana*" in the Vaṅgīya Sāhitya Parisat edition of of the Book. Accordingly he read the date as śaka 1581.

Since then the legend on the obverse as read by Bhattasali is unanimously accepted; however the same cannot be said about his reading of the date on the reverse.

A. N. Lahiri while discussing the Tripura Coinage in "*Baṁglā Deśera Itihāsa*", published in the year 1967 and edited by R. C. Majumdar, referred to the date of a discovered quarter rupee of Govinda Māṇikya as Śaka 1581 (1589 ?). Lahiri did not specifically state whether he was alluding to the coin which is lying in the cabinet of the Indian Museum.

Thereafter the coin in question is again referred by D.C. Sircar[2] who deciphered the date as Śaka 1601 (1679 A. D.). Incidentally Smith[3] writes that "Mr. Gait (Report, P. 4) mentions two coins of Tippera, one of Govinda Māṇikyadeva, dated Śaka 1602."

The sign which is inscribed between *Śrī* and *yu* on the obverse side of the coin in question was discussed by N. K. Bhattasali only. He tentatively suggested that this sign represented the trident of Lord Śiva. However, in our opinion this sign appears to be the Śivaliṅga." In this context a line in '*Rajamālā*' by K. P. Sen could be referred to :—

"राजार महर शिव लिग संस्थान ।"

It can be conclusively proved that it is a fallacy to ascribe the date Śaka 1601 and 1602 to the coin of Govinda

1. *NS,* XXXVII, pp. 48-49.
2. *Studies in Indian Coins,* p.
3. *IMC,* I, p. 297.

Māṇikya. The following informations may be mentioned in this connection :—

(1) A coin dated Śaka 1598 which was struck by Rām Māṇikya, the son of Govinda Māṇikya, has been discovered.

(2) '*Rajamālā*' refers to a stone inscription on a temple situated on the bank of the river Gomti at Udaipur which yields valuable information. According to the inscription the said temple was dedicated to Lord Vishṇu by Rām Māṇikya in the month of Māgha, 1599 Śaka, for the redemption of his father's soul.

It was customary amongst the Tripura rulers to strike coins to commemorate their installation. It is mentioned in '*Rajamālā*' that Govinda Māṇikya ascended the throne on the 13th day of Jyeshṭha of 1582 Śaka.

"पनर श विराशि शक जेष्ठ मास ताते ।
त्रयोदश दिन छिल बूधवार याते ।।
गोविन्द माणिक्य राजा हईल राजन ।
गुणवती महाराणी विख्यात भुवन ।।"

We read the date of the coin under discussion as Śaka 1582. In our opinion, the first unit of the date is one (1), the second unit is Maithilī-influenced five (5), the third unit is a very sophisticated Bengali unit eight (8) and the fourth unit is a cramped two (2). Bhattasali also suggested in his article that the last unit is a cramped two, but finally he read the unit as one (1) and deciphered the date as Śaka 1581.

Incidentally while discussing the coins of different denominations struck by Govinda Māṇikya in our article, "Tripurrāj Govinda Māṇikya Deva O Tāhār Mudrā", published in the Bengali weekly "*DEŚA*", dated 22nd, January, 1970, we have mentioned two full rupees of Govinda Māṇikya from the collection of G. S. Beed of Calcutta, where the date is larger in size and the last unit is a distinct "2".

Uptil now no dated coin of Govinda Māṇikya has been found which bears a date other than Śaka 1582.

To conclude the coin may now be finally described as below :

OBVERSE : In square with scroll-work in segments, three-line legend. The sign of Śivaliṅga inscribed between the second *Śrī* and *yu* of the first line.

(1) *Śrī Śrī yu*
(2) *ta Govi*
(3) *nda Devaḥ*

"The Illustrious Govinda Deva."

REVERSE : In circle surrounded by border of thick dots, a rampant lion to left; a ﹏ mark on his back. Between two fore-legs '*Śaka*'; between the two hind legs '*15*'; between the hindmost leg and the upturned tail '*82*'.

STRUCK BY	: The King Govinda Māṇikya of Tripurā.
IN THE YEAR	: Śaka 1582
METAL	: Silver
DENOMINATION	: Quarter Rupee
WEIGHT	: 2.460 gms.
SIZE	: 17.00 mm.

A NOTE ON ŚRĪ-VIGRAHA COINS FROM BIHAR

S. P. Singh

Bihar has yielded a large number of early medieval coins; but they are not properly studied and catalogued. A class of debased silver and copper coins bearing the legend *Śrī-Vi* or *Śrī-Vigraha* on one side and the Sassanian firealtar on the other, found at Ghoshrāwā,[1] Baḍgāon[2] (Patna District), Raghugadh[3] (Monghyr District), Hājīpur[4] (Muzaffarpur District) Diwāngaḍh,[5] Bhelāvar,[6] Vijayapurā[7] (Gaya District), Maurā Khorsoṭā[8] (Purnea District) and also from unknown location in the Shahabad,[9]

1. *ASR*, Vol. XI, pp. 174 ff.; Smith, *IMC*, Vol. I, p. 239, note 1.
2. *ARASI*, 1930-34, Pt. II, p. 250, Pl. IXXV. In 1930-34, a hoard of 54 billon coins of *Śrī-Vigraha* type was discovered by Chandra from one of the cells of the Monastery No. 10 at Nālandā. The coins are all round in shape. Chandra's attribution of these coins to the Hūṇas is unlikely.
3. *Indian Archaeology*, 1959-60, p. 65.
4. In 1917-18, 87 silver '*drammas* of Vigrahapāla' were discovered at Hājīpur. The coins were examined by R. D. Banerji and sent to the Officer-in-charge, Bihar and Orissa coin cabinet for deposit and distribution (*ARASI*, Eastern Circle, 1917-18, p. 26).
5. A silver coin of this type was presented to the Indian Museum (Calcutta) by S. K. P. Sinha in February 1939 (Cf. Register of Acquisition of the Archaeological Section, p. 39, Serial No. 6537/C. 17507.
6. A debased silver coin of the same type has been recently presented to the present author by Sri Jamuna Sharma of the village of Bhelāvar. The coin is said to have been found at the same village.
7. The village of Vijayapurā is situated about 6 miles to the east of Masaurhi Police Station. A billion coin of *Śrī-Vigraha* type was found in the private collection of Sri Sahjan and Sharma of the same village. The coin was collected from the surface of a mound situated close to the north of the village.
8. *ARASI*, 1930-34, pt. II, p. 311.
9. *Indian Archaeology*, 1960-61, p. 55.

Muzaffarpur[1] and Gaya Districts[2] are generally called *Vigrahapāl-dramma.* The silver pieces weigh between 55.9 and 62 grains,[3] while a copper coin illustrated by Cunningham weighs 65 grains.[4] It is thus clear that these coins followed the weight standard of a Greek drachma weighing 67.5 grains.

It is difficult to identify the issuer of *Śrī-Vigraha* coins. Some scholars are of opinion that they might have been struck by some kings of the Imperial Pratihāra family. R. C. Kar thinks that they were issued by king Bhoja I.[5] S. C. Ray goes a step further to suggest that they were perhaps issued by Bhoja's predecessors.[6] He believes that these coins were not issued by a single king. Cunningham observes that 'we cannot fix the country of Vigraha. As the Siron inscription calls the coins *Vigrahapāla-drammas,* the prince may have belonged to the Raghuvaṁśa family of Bhojadeva as all his successors took the suffix of Pāla.'[7] The attribution of these coins to Bhoja I or kings of his dynasty is doubtful. We have no evidence that Bhoja I issued coins of a completely new type when his Ādivarāha issues were so popular and that he ever assumed the title *Śrī-Vigraha.* No other king of his dynasty also bore this title. Smith attributed the finer specimens of this type to the Pāla king Vigrahapāla I and the debased ones to the second or third king of that name. He says that pieces which bear the legend *Śrī-vi* or *Śrī-Vigraha* may be assigned with almost positive certainty to one or other

1. Four *Vigrahapāla-drammas* found in the Muzaffarpur District were presented on loan to the Indian Museum (Calcutta) by the Director General of Archaeology in August 1940 (Cf. Register of Acquisition of the Archaeological Section, Indian Museum, p. 61, Serial Nos. $\frac{6749}{C16547}$ to $\frac{6752}{C16550}$.
2. The Bharatiya Kala Bhavan, Gaya, possesses a number of coins of this type acquired from various sites in the Gaya District.
3. Smith, *op. cit.*, p. 239, Pl. XXV. 10.
4. Cunningham, *CMI.*, p. 54. Cunningham says that the best *drammas* of Vigraha weigh between 56 and 65 grains; but as most of them would appear to have been in circulation for two or three centuries, their present average weight is about 60 grains. (Cunningham, *op. cit.*, p. 176).
5. *JNSI*, Vol. XVIII, p. 105.
6. *Loc. cit.*
7. Cunningham, *op. cit.*, pp. 51, 176.

kings of Magadha named Vigrahapāla.[1] K. N. Dikshit, however, thinks that the debased coins may have been issued after the originals by other rulers, not necessarily even of the Pāla dynasty.[2] R. C. Majumdar says that whatever view we might take of this, it seems from the extreme scarcity and the generally debased character of these coins that the attempt of the Pāla rulers to introduce a currency of their own was a faint-hearted one and was soon abandoned.' He further says that 'when we think of the long rule of the Pāla dynasty and the extent of its kingdom, its lack of currency becomes an intriguing problem, almost a a mystery which cannot be solved at present.[3]

It may be noted in this connection that the coins of the Pāla kings bearing any other name are lacking. Indeed, discovery of the coins of this type is recorded at places far away from the Pāla kingdom.[4] It may also be pointed out that in the early medieval period many a king of the ruling dynasties did not issue coins. The Sena kings are not known to have issued any coin at all and not a single coin which can be attributed to any Sena king has yet been discovered.[5] We, therefore, reject the theory that the Pāla kings issued *Śrī-Vigraha* coins. The reason may have been the abundance of old coins and cowrie-shells,[6] so

1. Smith, *op. cit.*, pp. 233, 239.
2. *ARASI*, 1927-28, pp. 104 ff., Pl. XLVIII, e. 2.
3. *History of Bengal*, Vol. I, pp. 667 f.
4. The coins *Śrī Vigraha* type have been found at Ahichchhatra (*Ancient India*, No. 1, p. 39) and also in different parts of Uttar Pradesh (*JNSI*, Vol. XXX, p. 209).
5. *History of Bengal, op. cit.*, p. 669.
6. In India, as in many other parts of the world, Cowrieshells were used as currency from very early times. Fahien, the celebrated Chinese pilgrim, who travelled in India about the beginning of the 5th century A. D., says that the people of Madhyadeśa used cowries in buying and selling commodities. No doubt the metallic coins of gold silver and copper were also in circulation. (Raychaudhuri, *Pol. Hist. Ind.*, 4th ed., pp. 169 ff.). Chau-ju-Kua makes a general statement about the people of Tien-chu (India) that they used cowries as a medium of exchange. The *Tabaqat-i-Nasiri*, states that when the Muhammadans first came to Bengal, they did not find the people using money currency, but cowries. Ibn-Batuta also records that the people of Bengal used cowries as money and purchased them

that the moneyers and traders felt no need of getting new coins struck.[1]

Strangely enough, R. K. Sethi[2] attributes *Śrī-Vigraha* coins to king Vigraharāja II of the Chāhamāna dynasty, who according to him ruled in 973 A. D. Unfortunately he did not notice that such coins are described in the Siyadoni inscription[3] as *Vigraha-pālīya-dramma*, *Vigrahapālasatka-dramma* and *Vigraha-dramma* which were in circulation between (Vikrama) Saṁvat 965-969, i. e. 908-09 and 912-13 A. D., a period much earlier than *Vigraha-rāja* II.

It will thus be seen that the coins of this series were in circulation not only in Bihar and Bengal,[4] but over a very extensive region. Their discovery in a large number in Bihar and Uttar Pradesh[5] shows that they were issued by private moneyers.

from the inhabitants of Maldives (K. A. N. Sastri, *Foreign Notices*, p. 122). For details see D. C. Sircar in *JNSI*, Vol. VII, pp. 82 ff. [For a full discussion on this subject see *ibid.*, XXVIII, pp. 127-142. *AMS*].

1. The economic life of the country depended on the activites of the organised corporate bodies of the *Naigamas*, *Śreṇis*, *Śreshṭhins*, etc. which also controlled the currency. If there was already in circulation a sufficient number of coins and the traders and merchants felt no need of new coins, the kings refrained from issuing them, e.g. Gāṅgeyadeva was the only king of the Kalachuri family of Tripurī who struck coins; but the successors felt no need of minting new coins because the coins struck by Gāṅgeyadeva and old coins were sufficient for the kingdom. Sometimes coins remained in circulation for centuries after their actual issue. Thus the Anjaneri plates (709 A. D.) of Sendraka Bhojaśakti refer to the *Kṛishṇarāja-rūpaka* which was the silver coin issued by Kalachuri king Kṛishṇarāja who ruled in the second half of the 6th century A. D. (Cf. Sircar, *Indian Epigraphy*, p. 429).
2. *JNSI*, Vol. XXX, p. 209.
3. *Ep. Ind.*, Vol. I, p. 169. The inscription records the donations made on different dates by private individuals in favour of various deities.
4. In 1927-28, a copper coin of *Śrī-Vigraha* type (*Vigrahapāla-dramma*) was discovered in the excavation of Pāhārpur (*ARASI*, 1927-28, p. 104., Pl. XLVIII, e. 2). K. N. Dikshit attributes the Pāhārpur coin to 'the first Vigrahapāla' of the Pāla dynasty (*Ibid.*, p. 105).
5. The coins have been found in different parts of Uttar Pradesh (*JNSI*, Vol. XXX, p. 209),

As we know, in ancient and medieval India, the right to mint coins was generally leased out to the goldsmiths and there was a large scale imitation and also private production.[1] A careful examination of the coins in question shows that they belong to different varieties and seem to be manufactured from different sets of dies and also probably by different moneyers. Some of the coins of this series bear the legends, *Sa*, *Śrī*, *Śrī-Vī*, *Śrī-Vigraha*, *Dra* (*Dramma*) etc., while there are also others which bear no legend at all.[2] These coins, therefore, appear to be imitation coins copied from various medieval Sassanian issues which adopted drachma standard of weight. Some of the *Śrī-Vigraha* type coins are a close copy of the *Śrīmad-Ādivarāha-dramma* of Bhoja I and not for removed in date while there are a number of coins of this series which may be assigned to a much later date on palaeographical grounds

1. *Chronology of the Punch-Marked Coins*, ed, Narain and Gopal, p. 158. During the Peshwā period minting of coins was licenced to the owner of the private mints who was usually a goldsmith. Not only that, in some provinces of Peshwās 'dominions the land-holders established their own mints from which counterfeit coins were issued (Cf. *JNSI*, Vol. VII, p. 79). Muhammad' Aufi speaks of a certain Rai of India who conferred on his brother the Chieftainship of Nahrwāla, who issued counterfeit dirhams and circulated them in different parts of the country. The Chinchani (Thana) inscription of the 10th century A. D. speaks of money coined by a trader named *Śresthin* Gambhuvaka (*Ep. Ind* , Vol. XXXII, p. 60).
2. The present author has personally examined the coins in the Indian Museum (Calcutta) Collection and various private collections in Bihar. The Bhelāvar specimen bears the legend *dra* and corresponds to coin No. 6 of the Indian Museum Catalogue (Smith, *op. cit.*, p 239). The Vijayapurā specimen bears no legend. Coin No. 1 of the Indian Museum Catalogue (Smith, *op. cit.*, Pl. XXV. 10) contains the legend *Śrī* and corresponds to the Coin No. 4 of the Badgāon specimen (Cf. *ARASI*, 1930-34, pt. II, p. 280, Pl LXXV, No. 4, in the top row). This paper was read in the monthly Seminar of the Department of Ancient Indian History and Culture of the Calcutta University.

THE CURRENCY SYSTEM OF EIGHTEENTH CENTURY UPPER INDIA : A CASE STUDY OF THE BANARAS REGION

Kamala Prasad Mishra

Under the Great Mughals* the privilege of coining, in so far as gold and silver were concerned, was strictly guarded,[1] but minting was free, that is any one could take his bullion to the mint and get it converted into specie at a small charge. In practice, however, this was largely performed by the *sarrafs*.[2] Though there were a number of mints in the provinces to facilitate issuance of coins and bring them within the reach of the public yet the control of the imperial authority over them appears to have been nearly perfect so that the weight and fineness were pretty uniform, and there was little scope either for the mint officials to debase the coins or for the *sarrafs* to charge an arbitrary *batta* or discount. Since there was a standard Mughal rupee used throughout the empire, except at Surat, where a local silver coin called *mahmudi* was also current, the *sarrafs* in northern India would mainly have been responsible for noting and allowing for the *batta* on coins not of the current year.[3] And although they dealt mostly in the imperial currency,[4] still their work could not have been light for Mughal coins were tri-metallic, that is of gold, silver and copper and need often arose of changing one into another.

* The manuscript source used in this paper are from India Office Library, Foreign and Commonwealth Office, London.

1. C. J. Brown, 'Some Remarks on the Mughal Currency', *JUPHS*, Vol. 1, p. 152; Q. Ahmad, 'An Historical Account of the Banaras Mint in the Later Mughal Period', *JNSI*, XXIII, p. 198.
2. Irfan Habib, 'The Currency System of the Mughal Empire', *Medieval India Quarterly*, vol. IV, p. 1.
3. Irfan Habib, 'Banking in Mughal India', in T. Raychaudhury, ed., *Contributions to Indian Economic History*, 1, Calcutta, 1960, p. 5.
4. It should be pointed out that the *sarrafs* had also to deal with the many non-Mughal coins which found their way into northern India, such as *rials*, *mahmudis*, *pagodas* etc.

The silver coin called *rupya*, or in its Anglicised form the rupee, first introduced by Sher Shah and adopted by the Mughals, was the basic unit for all cash transactions, both commercial and administrative.[1] By the custom of the country all newly coined rupees were called *siccas* and passed at their full original value for one year, after which they were subject to a *batta* or discount varying from 2 to 3½ per cent, in the Banaras region,[2] according to their dates and passed under the denomination of *sanwats*.[3] The *sanwat* rupees were, however, the coins naturally most often used in day-to-day transactions, and even the government revenue was collected and paid into the treasury in *sanwat* [4]

In eighteenth century upper India while the basic currency unit of the Mughals, i.e. *rupya*, remained unaltered, a great change had taken place in its purity and weight. This was the result of the adoption of new system, that of farming out the mints introduced by Ratan Chand, *diwan* to Farrukhsiyar in about 1715. This practice, coupled with the decline of imperial authority led to the custom of debasing and changing the value of the coins, in some of the mints almost every year.[5]

1. W. W. Hunter, *Annals of Rural Bengal*, London, 1897, p. 299; Habib, 'The Currency System of the Mughal Empire', p. 2.
2. See Hastings' 'minute and observation relative to the Banaras mint, 12 June 1775, Bengal Secret Consultations, 12 June 1775, Range A, vol. 29, p. 105.
3. The *sanwat* rupees, sometimes called *chalani* (current) or *peth*, were also known as Gauhar Shahis under Shah Alam's reign. Gauhar Shah was the name of Shah Alam prior to his accession. By Gauhar Shahi rupees, therefore, were meant those struck in Shah Alam's reign with the exception of the current year's issues called *siccas*; the latter became *sanwats* immediately after the coining of new *siccas*. In Bengal the system in the early 1770s was a little different. There all the rupees in the second year of their coinage passed at a discount of three per cent against those of the first year yet both were termed *siccas*. From the third year, and ever after, they were treated as *sanwats* and passed at a discount of five per cent. See Fowke to governor General & Council, 16 November 1775, Manuscript European G. 3, p. 9; J. Steuart, *The Principles of Money Applied to the Present State of the Coin in Bengal*, London, 1772, p. 16.
4. Habib, 'The Currency System of the Mughal Empire,' pp. 4-6.
5. Barlow to Governor General in Council, 24 August 1787, Bengal Public Consultations, 26 December 1787, Range 3, vol. 30, pp. 958-9.

The working, or malfunctioning, of this latter day system can be nicely studied at Banaras. A mint was first established there in 1733. It was under the control of the Mughal emperor but according to the custom of the day was usually farmed. From 1748 to 1750 it was entrusted to the charge of Raja Balwant Singh who, in turn, formed the mint out to one of his associates, named Nandram. The latter in order to increase his profit debased the coins. The mint was consequently taken out of the raja's hands and given to the *qiladar* or governor of the fort of Chunar in 1751. From the commencement of the reign of Alamgir II in 1754, the mint fell into the hands of the Nawab of Awadh and remained under him until the transfer of the Banaras Zamindari to the Company in 1775. The Company for their part entrusted the managment and administration of the mint to Raja Chet Singh on the condition of issuing coins of standard weight and fineness.[1] Upon the expulsion of Chet Singh in 1781, the mint was taken out of the new raja's control and put under the direct supervision of the resident.[2]

From a perusal of Barlow's[3] detailed report on the working of the Banaras mint, submitted to the Governor General in Council in August 1787, two features generally emerge. The first is that the mint regularly was farmed, or ever given in *jagir*. The *jagirdar* in turn could also farm it out to the highest bidder. Short term contracts, often for only a year, appear to have been mostly in vogue, although there was no bar to the same person obtaining the farm more than once. Sometimes even discredited farmers, against whom charges of debasing the coins had been proved, also secured the farm. The second feature, a corollary of the first, is that there was frequent debasement of the coins by the mint farmers to increase their profit margins by the admixture of more alloy, or by striking coins of lesser weight than

1. See Bengal Council to Fowke, 24 August 1775, Bengal Secret Consultations, 24 August 1775, Range A, vol. 30, pp. 85-8.

2. Below to G. G. in C., 24 August 1787, *BPC*, 26 December 1787, Range 3, vol. 30, pp. 945-55.

3. G. H. Barlow was a Sub-Secretary to Bengal Government. In June 1787 he was sent on a commission to report on the trade and coinage of Awadh and Banaras. He submitted his detailed report to the government in August 1787.

specified.[1] For example in 1759 Deeda Mal, the mint farmer debased the rupee to 100 *Chawals* (grains of rice) assay and half a *ratti* in weight. In short during the first four decades of the working of the mint, the weight and fineness of the Banaras rupee hardly corresponded to the specified standard.[2]

Since the establishment of their political authority in Bengal the Company's government had been made increasingly aware of the problems created by the multiplicity of coins current in the province. They accordingly made great efforts to stabilize and bring a certain amount of uniformity into the currency system of the time. To do this they devised for Bengal an imaginary currency called 'the current rupee', in which could be expressed the value of all other coins, *siccas* or *sanwats*.[3] In Banaras the existence of a similar situation of a multiplicity

1. Barlow to G. G. in C., 24 August 1787, *BPC*, 26 December 1787, Range 3, vol. 30, pp. 945-55.

2. The weight of the Banaras rupee was fixed by the Mughal at 9 *mashas* and 7 *rattis* and the assay at 22 *chawals* weight of alloy. Between 1733 and 1775 the rupee was debased to 32 *chawals* and in the 1760s the assay varied from 22 to 40 *chawals*, i.e. each rupee contained from 22 to 40 *chawals* of alloy. The weight of the rupee which was reduced in 1759 was however restored in the next year but again in 1766 it was brought down to 9 *mashas*, 6 *rattis* and 6 *chawals*, at which it stood for the rest of the period. It is difficult to determine absolutely the precise weight of the *masha* in terms of the English ponderary system. The *masha* was founded on the *ratti*, the *ratti* on *chawals* or grains of rice (8 *rattis* made a *masha* and one *ratti* consisted of 8 *chawals*). No two *rattis* or rice grains were, at any time or in any place, exactly alike in weight. (See S. H. Hodivala, *Historical Studies in Mughal, Numismatics*, Calcutta, 1923, p. 233). However the evidence of certain Banaras rupees preserved in the British Museum suggests that the weight of the rupees coined between 1737 and 1775 stood at 176 or 175 grains troy, and from 1776 to 1892, at which latter date the coinage of the Banaras rupee was discontinued, it invariably stood at 175 grains troy, i.e. 168.875 grains troy of pure silver and 6.125 grains troy of alloy. See S. Lane-Poole, *BMC, Moghuls*, 1892, pp. 211-44 ; E. Thurston, 'Note on the History of East India Company', *JASB*, LXII, pp. 52-84.

3. See N. K. Sinha, *The Economic History of Bengal*, vol. 1, Calcutta 1956, pp. 119-30; Hunter, *op. cit.*, pp. 310-22.

of coins of varying degrees of fineness reported by Fowke,[1] brought to the notice of government the need for reform. The first step in the direction was taken in early 1776 when the raja agreed to coin rupees of the standard weight of 9 *mashas*, 6 *rattis* and 6 *chawals* including an alloy of 2 *rattis* and 2 *chawals;* any deviation from which could result either in his forfeiture of the control of the mint or the imposition of a heavy fine. To avoid the confusion caused by the annual alteration of the value of the rupees, it was agreed at the same time that in all future coinage the die used should be that of the 17th *san* or regnal year of Shah Alam (corresponding to 1189 A. H. or 1775 A. D.) and that all rupees coined from that date should be denominated *siccas* and should pass current without any *batta* or discount.[2] Two years later a similar provision was made in Bengal by which the *siccas* of the 19th *san* were made the standard and an unvarying date was used upon all the subsequent issues.[3]

1. Fowke, upon an enquiry into the Banaras mint records, found in 1775 four varieties of rupees coined at Banaras. Of these, three, the *machhlidar*, *phooldar* and *cowldar* were the newly coined *siccas* of the 16th regnal year of Shah Alam and the fourth, *trishulis* were *sanwats* of earlier dates. Of all the varieties, the *machhlidars* were found to be the best for they corresponded to their specified weight and fineness and these were the rupees in which the Bengal Council finally settled that their revenues were to be paid by the raja. Fowke to G. G. & C., 16 November 1775, *MSS*, *Eur. G. 3*, pp. 5-6 ; Bengal Council to Fowke, 13 December 1775, *BSC*, 13 December 1775, Range A, vol. 32, pp. 328-9.

   The appellation *machhlidar* was applied to the newly coined *siccas*, from the head of a fish (the fish was the standard of the Nawabs of Awadh) being stamped on the coin. Similarly *phooldar* and *cowldar* were so known from having a lotus and a branch of a flowering plants respectively stamped on the coins. *Trishulis* were the coins first struck in the 4th, 5th and 6th regnal years of Alamgir II and re-issued in the corresponding years of Shah Alam. They had the mark of *trishul*, i.e. trident of the Hindu god Mahadeva. These marks were added by the mint officers to distinguish their issues from the others. See Barlow to G. G. in C., 24 August 1787, *BPC*, 26 December 1787, Range 3, vol. 30, pp. 957 and 979-80.

2. Fowke to G. G. & C., 18 February 1776, *BSC*, 26 February 1776, Range A, vol. 34, n. p., Barlow to G. G. in C., 24 August 1787, *BPC*, 26 December 1787, Range 3, vol. 30, pp. 954-5.

3. Sinha, *op. cit.*, pp. 122-3.

The main object of these regulations was to fix value of the rupee, irrespective of its bullion content. It was believed that in the course of time all the old rupees would be brought to the mint and re-coined into *siccas* so that a uniform, state guaranteed coinage would emerge. But all these measures, though highly expedient, proved in themselves inadequate to reform the abuses which had introduced themselves into the coinage of the country during the unsettled conditions of the mid-eighteenth century. Two factors appear to have been responsible for the failure of the plan. Firstly the insertion by the officers of the actual *Hizri* date in small figure completely defeated the purpose for which an unvarying regnal year was put on all coins [1] This in effect made the rupees of previous years, except the current ones, *sanwats* and provided the bankers-who had the job of money-changing-with an opportunity of charging discounts as before. Accordingly in 1783 Kashmiri Mal and some other bankers of Banaras exacted from the *amils*, or revenue farmers, a *batta* of 2½ percent on all rupees coined between the years 1775 and 1783, the *amils* in turn charged 3½ per cent from the *raiyats*, and thus the old system of altering the value of the rupees annually, which the government had abolished in 1776, became general throught the region once again.[2]

The second factor was the prevalence of certain types of rupee coined before the said regulation and even during the time of Alamgir II in which by custom the revenues were still collected in some parts of the region. For example in Ghazipur district the cultivators and zamindars paid the government revenue in the old *trishuli* rupees of the 4th, 5th and 6th regnal year of Alamgir II. These rupees though *sanwats* of a very old date, being in constant demand for the circulation of the district, were sold for more than their intrinsic value in the mid 1780s.[3] As might be expected the persons who gained most from this were the bankers. They had their agents who bought up these *sanwat* rupees in different parts of the country and sent them

1. Barlow to G. G. in C., 24 August 1787, *BPC*, 26 December 1787, Range 3, vol. 30, pp. 977-8.
2. Ibid., pp. 978-9.
3. Ibid., pp. 964-5.

where they were current. Barlow summarised the situation in 1787 as follow :

> 'The Ryot being obliged to pay his rents in the particular species of Rupees current in his Pergunnah, the Banker is enabled to rate it at what value he pleases. If the farmer has engaged to pay his Revenue to Government in Siccas the Banker charges him nearly the actual difference between Sunaats and Siccas, if in Sunaats the Banker takes the same Batta from the Collector for Bills on Calcutta in Siccas. In both cases the Rupees are sent back again to the Pergunnah from whence they came where the Banker's agent again disposes of them at an enhanced price to the Ryots.'[1]

Thus in a situation like this when one kind of rupee formed the medium of revenue collection from the peasants and another that of revenue payment into the government treasury, the *amil's* banker who had the exchanging of them could always contrive to take a considerable gain for himself.

The *amil* could only collect the revenue at harvest times while he had to pay the government every month. This he did through the medium of bankers *dakhilas* or credit notes. The system made him always a debtor to the banker who, taking advantage of his situation could always exact his own terms.[2] The *amil* 'being generally in his debt for *kists* advanced to Government, & Ryots for money to pay the aumil, the whole circulation of the country', as Barlow put it, thus came under the control of the bankers.[3] There is no doubt that bankers enjoyed considerable profits from their position as money-changers and financiers. Barlow commented on their lucrative business :

> 'Such is the excess to which the Shroffs have carried this trading in coin, that if a Rupee is bought from a Banker and sent to him for sale immediately after, he will not receive it back without demanding a profit between the

1. Ibid., pp. 965-6,
2. Duncon to G. G. in C., 12 September 1788, Bengal Revenue Consultations, 3 October 1788, Range 51, vol. 25, pp. 190-1.
3. Barlow to G. G. in C., 24 August 1787, *BPC*, 26 December 1787, Range 3, vol. 30, p. 966.

sale and purchase. Accordingly in the Nirknamahs or price Currents of the Markets, there are two prices for Rupees inserted, the price of purchase (what the Banker will give) and the price of sale, the rate at which he will sell[1]'.

So long, therefore, as the *sarrafs* were enabled to make such profits on the buying and selling of old, and often debased, *sanwat* rupees, it could hardly be expected that they would carry them to the mint where the quantity of alloy in the coin, and the duties on the recoinage would subject them to a heavy loss.

To remove the prevalent abuses in the currency system and to reduce the undue influence acquired by the bankers over the circulation of money in the country. Barlow accordingly submitted to government in August 1787 the following propositions :[2]

1. 'That the Rupees coined throughout Bengal, Behar and the District of Benares, be of the same weight, standard size and impression supposing the Rupee of the 19th sun or year now coined at Calcutta.'

A similar recommendation was made in regard to the coinage of gold *muhrs* and copper *paisas* ; and it was suggested that the proportionate value of each in relations to the *sicca* rupee should be fixed by government.

2. 'That the engagements of the aumils and Farmers of the Revenue shall in future be made in the established *sicca* Rupees.'
3. 'That all rents paid by the Ryots to the aumils and Renters should be in the established Sicca Rupees.'
4. 'That all purchases, sales and mercantile transactions whatever, all advances for the investment, all bonds and engagements for the payment of money, should be made in the established sicca coin.'
5. 'That for old Rupees brought to the mint if found upon melting down to be of the proper standard an equal weight of the new coin shall be returned to the proprietor without any fee, charge or expense whatever.'
6. 'That persons bringing old coin to the mint shall have it assayed in their presence and upon the quality of new

1. Ibid, pp. 966-7.
2. Ibid, pp. 976-1022.

coin which they are entitled to being ascertained, shall have the option of receiving an order for the amount (at a short date) upon the Treasury or waiting till it can be delivered from the mint.'

These recommendations were favourably received at Fort William and Duncan was consequently asked whether they could be implemented without incurring the opposition of the *sarrafs* and causing inconvenience to the public. In June 1789 Duncan accordingly issued twelve queries, comprising the above propositions and adding a few of his own to a cross section of the community, the mint officials, the *sarrafs* and the judge-magistrate of Banaras for their opinion and the likely reactions of people in general to the intended measures.[1] From their replies it is evident that while the mint officials were in general accord with the proposals, the greatest objection was raised by the bankers who, fearing the loss of at least five per cent on the recoinage of 17 *san* Banaras rupees into 19 year Bengal *siccas*, and also the risk that they might not get sufficient new coins in time to answer the drafts brought upon them by pilgrims and merchants from other parts of India, were unwilling to accept the proposed scheme.[2] Ali Ibrahim Khan, the judge-magistrate of Banaras, considered the scheme inadequate and opposed it on two grounds : First, the scheme being an innovation in the established custom had a tendency to provoke general opposition and secondly, he believed that the advantages arising from its implementation would be meagre to the Company as compared to the loss which would accrue to the people in general and *sarrafs* and money dealers in particular.

Both these arguments of Ali Ibrahim Khan if critically analysed would appear unsound. To say that any change in the currency system would arouse a general reaction, and instead of bringing good would cause loss to the public, appears unconvincing. It is true that initially reform might have created some

1. See copy of queries originally issued by Duncan on 30th June 1789. enclosed in Duncan to G.G. in C., 23 March 1795,, *B. R. C*, 4 September, 1795, Range 53, vol. 34, pp. 112-25.

2. Observations of the Banaras bankers relative to the proposed new coinage enclosed in Ali Ibrahim Khan to Duncan, 22 July 1789, B.R.C. 4 September 1795, Range 53, vol. 34, pp. 129.32.

problem for the people, as all changeovers from one established system to another are bound to do, but if considered in their long term results, they would have been a welcome measure. The only section of the community which was bound to lose from a uniformity in the currency was that of the *sarrafs*, who would have deen deprived of the opportunity of charging discount on the changing of coins. Indeed, from a perusal of his suggestions, contained in the latter part of his letter to Duncan, relating to certain modifications in some of the proposed articles of the scheme, it would appear that Ali Ibrahim Khan himself was not totally opposed to the idea.[1] Thus he suggested that for a period 17 *san siccas* might be used in meeting bankers drafts so as to allow people to become aware of the new system. He also proposed that the differential rates in the buying and selling of copper coins might be retained so as to give subsistence to a class of people known as *khurdias* (dealers in small coins) whose livelihood depended upon such transactions. Finally he suggested that the old coins should not be declared illegal tender but should be allowed to pass at a discount.[2]

The united opposition of the *sarrafs* and the advice tendered by Ali Ibrahim Khan appear to have carried weight and the proposed scheme introducing the Bengal system into the coinage of Banaras was deferred. About six years later when it came up again in 1795 for the government's consideration it was again not implemented for the same reasons as in 1789. In his report of March 1795 Duncan wrote to government that before taking any final decision they should consider 'the powerful influence of the Shroffs in Benares, their extensive connections in money dealings throughout India, and the confined notions and irritable Habits of many of the settled and so journing Inhabitants of the city and District,' which would 'require the maturest deliberation.'[3]

1. Ali Ibrahim Khan to Duncan, 22 July 1789, *BRC*, 4 September, 1795, Range, 53, vol. 34, pp. 125-9.
2. Ibid.
3. Duncan to G. G. in C., 23 March 1795, *BRC*, 4 September 1795, Range 53, vol. 34, p. 108.

THE MUGHAL MINT NASĪRĀBĀD

A. A. Kadiri

The first to discover and identify the mint Nasīrābād was M. A. Suboor, the erstwhile Coin Expert of the Central Museum, Nagpur. He had published in 1918 a rupee of Aurangzeb which he claimed as having been issued from that mint in the 34th regnal year,[1] but the writing being damaged, as may be seen from its illustration, the mint-name is disfigured and the reading is quite uncertain.[2] Suboor had identified the mint-town with Nasīrābād, then in Khandesh and now in Jalgaon district of Maharashtra. About a couple of decades later, Captain P. S. Tarapore published a rupee of Aurangzeb, dated R. Y. 34/A. H. 1102 on which too he deciphered the mint-name as Nasīrābād.[3] Four coins from this mint, three of Aurangzeb and one of 'Ālamgīr II' are found listed in three recently published catalogues of Mughal coins.[4] Of these, the one described in the Central Museum Catalogue, is evidently the same as the one previously noticed by Suboor, but the two coins of Aurangzeb, one dated R. Y. 33/A. H. 1103 and the other dated R. Y. 49/A. H. 1116, listed (with plate) in the Bombay Catalogue are new. The date on the Central Museum coin viz. R. Y. 34/A. H. 1102 is clearly visible in the illustration, and therefore how Suboor should have failed to record it in his reading is inexplicable. The arrangement of the legend on all these coins is identical, except in the case of the Central

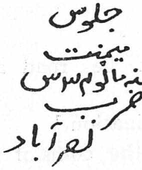
1. *NS*, XXX (190), pp. 260-261.

2. I have personally seen the coin and there too, the mint is not at all clear.

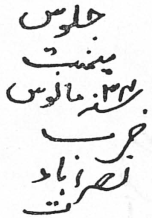
3. *JNSI*, II, p. 127.

4. C. R. Singhal, *Supplementary Catalogue of Mughal Coins in the Lucknow Museum*, (Lucknow, 1965), pp. 34-35, 160, no. 1103 and plate ; M. K. Husain, *Catalogue of Coins of the Mughal Emperors* (Bombay, 1968), p. 83, nos. 387-88 ; V. P. Rode, *Catalogue of Coins in the Central Museum*, Nagpur, Part I (Bombay, 1969) p. 300, no. 1910.

Museum coin, where the position of the regnal year is slightly different,[1] as will be clear from the reverse legends of these coins as illustrated below :



[2] *NS*, XXX, pp. 260-61
NMC, No. 1910.



[3] *JNSI*, II, pp. 128-9.
Husain, Nos. 387-88.

Incidentally, in the illustration of the coin described by Tarapore, part of the letter ت with two dots is clearly visible, but he chose to decipher the mint-name as Nasīrābād only.

The fourth so-called Nasīrābād coin is that of Ālamgīr II[4], which is similar to the one published by Suboor[5] on which he read the mint-name as Nusratābād. Tarapore also published a coin of Shāh ʻĀlam II on which the arrangement of the mint-name is identical to the above two coins, but this time he too chose to read it as Nusratābād, though in the illustration of both the latter coins the letter ت is not visible. Singhal

1. [The regnal year is inscribed at the same place, i.e. between the letters لو and س of مالوس on the coins illustrated in *NS*, XXX, p. 261 and *JNSI*, II, pl. XI, no. 7.—*N. A.*]
2. [On the coin of *NS*, the word *sanah* preceding the word *mānūs* is non-existent.—*N. A.*]
3. [On the *JNSI* specimen, the regnal year and the word *sanah* are not visible preceding the word *mānūs*.—*N. A.*]
4. Singhal, *op. cit.*, p. 160, No. 1103.
5. *NS*, XLIII (306), p. 59.

while commenting upon Tarapore's reading 'Nusratābād,' asserted that the mint-name could be read clearly Nasīrābād. According to him, since no portion of the letter ت is visible anywhere, the mint-name cannot be read as نصرت آباد (Nusratābād) by any stretch of imagination.[1]

The legend on the reverse of the coins of Ālamgīr II and the one assigned to Shāh 'Ālam II as read by Tarapore, Suboor and Singhal is as under :

مانوس
یمنت
سنه ۷ جلوس
ضرب
نصرآباد

Now, H. N. Wright, giving his opinion as editor on Suboor's reading of the mint-name, had noted that there is no place for ي between ص and ر .[2] I would also like to point out one more thing on palaeographic consideration, that there should have been a notch between ص and ر , if it was meant to be read as نصیر (Naṣīr) instead of نصر (Naṣr or Nusr[at]). In the absence of this notch, to read it as نصیر (Naṣīr), is wholly unwarranted and misconceived. On this ground the mint-name can not be read as نصیرآباد (Naṣīrābād), whether the letter ت in the bottom line is

1. Singhal, *op. cit.*, pp. 34-35.
2. *NS*, XXX, p. 261.

visible or even present or not. At the most, if no trace of ت is visible, is could be read as Nasrābād, which is not known to have been a mint-town. It may also be pointed out that the first part of the mint-name نصر (Naṣr) appears exactly identical on all coins, those assigned either to Naṣīrābād or Nuṣratābād mint including the one on which traces of ت are visible (though assigned to Naṣīrābād).

Regarding identification of the mint-name, apart from the two references quoted by Suboor, I have been able to trace at least one more reference to Naṣīrābād in a *Farmān* of Shāh Jahān.[1] But the events described in which its mention occurs pertain to the latter period of Shāh Jahān's reign, that is to say at least half a century prior to the date of the first so-called Naṣīrābād coin. This place might have acquired some importance in Shāh Jahān's period, when the territories adjoining Khandesh were the focus of his aggressive activities. But after the 30th regnal year of Aurangzeb, the boundaries of Mughal possessions in Deccan had extended too far to allow Naṣīrābād of Khandesh, to retain its erstwhile importance, if at all it had any. On the other hand, we do come across another place which was quite an important place at about this time viz. Naṣīrābād-Dharwar.[2] The fort situated in Karnatak was as Azamnagar Belgaum and like it could have been a mint-town. Thus, even if it is conceded for a moment that the Naṣīrābād is correct (which does not appear to be so) its identificatian with the place of the same name situated in Khandesh would be a mere conjecture. I think this much is enough to take away the wind from the sails of Suboor's identification of that so-called mint-town.

1. G. H. Khare, *Persian Sources of Indian History*, vol. II (Poona, 1937), p. 10.

2. Shāh Nawāz Khān, *Ma'āthiru l-Umarā*, vol. I, Calcutta, 1888), 193.

Then again the mint cannot be read other than نصرآباد (Naṣrābād) or نصرت آباد (Nusratābad). The fact that the ت in the bottom line is invisible cannot be sufficient ground for reading it as نصیرآباد (Naṣīrābād), instead of either of the two just mentioned readings, in view of the palaeographical aspects of the reading نصیر (Nasīr) and نصر (Nasr) referred to above. It can be asserted that it is Nusratābād only as is clear from the fact that part of the letter ت is visible on the coin of Aurangzeb published by Tarapore, who unfortunately failed to notice it himself.[1]

I venture to suggest that mint-name on all the coins assigned to Nasīrābād should be read as Nusratābād and that Nasīrābād, should be deleted from the list of the Mughal mint-towns.

1. *JNSI*, vol. II, p. 128.

COINAGE OF YOGANARENDRA MALLA TO INDRA MALLA OF PATAN

B. N. Shrestha

[Pls. I–IV]

HISTORY

Yoganarendra Malla

Yoganarendra Malla, the son of Śrīnivāsa Malla, was born on N. S. 787 (1667 A. D.).[1] During his father's life time in N. S. 804 (1684 A. D.) he ascended the throne, and in the same year he put coins into circulation. Inscribed on coins are also the names of his queens. Some time after his accession to the throne on Thursday in Pausha kṛishṇa pañchamī hasta nakshatra in N. S. 805 (1685 A. D.) his father crowned him king.[2] Inscribed on the coins issued by Yoganarendra Malla are Newārī and Devanāgarī scripts along with Sanskrit and Newārī language. He brought out coins which were different in shape from those of other kings. He issued triangle-shape Suki and square-shape ¾ Mohar. Inscribed on many of his coins are the figures of Yāntrik symbol. His coins are much refined.

All the Mohars, from the time of Pārthivendra Malla of Kāṭhamāṇḍū (N. S. 800=1680 A. D.) to the last king Jayaprakāśa Malla, with the exception of the Mohars of Bhupālendra Malla (N. S. 808 and 820 = 1688 and 1700 A. D.), bear the Ashṭa Maṅgala (the symbols of eight lucky signs).

In Pāṭan Yoganarendra Malla firstly used *Ashṭa Maṅgala* in Suka (½ Mohar). After this no other coins, except those of Mahīndra

1. (Śrāvaṇa śukla chaturthī ghaḍī 3/8 uparānta pañchamī uttarāphālgunī nakshatra ghaḍī 42/53 śivayoga somavāra (Monday) dinagata ghaḍī 12/31 mithunanavāṅśa dosro dreshkāṇa). See *Itihāsa Saṁśodhana Maṇḍala 'Pūrṇimā'*, No. 6, p. 38.

2. Ibid., No. 9, p. 20.

Siṁha Deva, Rājyaprakāśa Malla and Jayaprakāśa Malla, bear these symbols on the Mohars. Although Mahīndra Siṁha Deva and Jayaprakāśa Malla were the kings of Kāṭhmāṇḍū, when they ruled Pāṭan, they issued different coins bearing the legend *Karuṇā-maya*. But even in those coins they did not remove the symbols of *Ashṭa Maṅgala*.

It is noticeable that except the Mohar of Yoganarendra Malla issued in N. S. 820 (1700 A. D.) no other coins bear the name of the ruling king on both the obverse and the reverse sides. This very coin firstly carried the epithet *Vīra* to his name. Hence these two things clearly show that the king Yoganarendra Malla seemed to have been most powerful.

Many historians are of the opinion that Yoganarendra Malla ascended the throne in N. S. 805. Other historians, however, try to prove that Yoganarendra Malla did not ascend the throne in N. S. 805 because the coins bearing his name had already been put into circulation in N. S. 804. Therefore it can be argued that the year inscribed on the coin will not necessarily be the regnal date. The Suki issued in the name of Bhāskara Malla in N. S. 818 (1698 A. D.), two rupees coin and two tolā gold coin of Trilokya Vīra Vikrama Shāha Deva in Ś. S. 1771 (1849 A. D.) and the coins inscribed with the name of other queens may be cited as examples. Coins inscribed with the names of queens are found from Lichchhavi period to the present time, including the coin of H. M. Queen Ratna Rājya Lakshmī Devī in V. S. 2012 (1956 A. D.), the consort of H. M. King Mahendra Vīra Vikrama Shāha Deva.

The Suki of Bhāskara Malla issued in N. S. 818 (1698 A. D.) and coins of Trilokya Vīra Vikrama Shāha Deva issued in Ś. S. 1771 (1849 A. D.) were introduced during the period when they were heir-apparents to the throne. In most of the coins the names of queens are also inscribed along with those of kings. In many other coins only the names of queens are inscribed. The coins with the names of queens do not any way prove that those queens were the sovereign rulers of the kingdom. Kings might have had their queens' names inscribed on coins in order to show their love for them or introduce them to their people. From Lichchhavi period to the

1. Regmi has mentioned one stone inscription bearing the date 804 N. S. See his *Medieval Nepal*, Part II, p. 307.

present time, there has been the tradition and custom of inscribing the names of kings and queens on the coins. No coins bearing the names of queens are found so far to prove that those queens were the sovereign rulers of the kingdom though we know, of course, widowed mothers of minor sovereigns who issued ¼ Mohars as regents.

On the basis of the coins issued by Yoganarendra Malla in N. S. 804,[1] it can be said that those coins were not issued during the time he was a prince. They must have been issued by his father Śrīnivāsa Malla on the occasion of Yoganarendra Malla's accession to the throne. Had those coins been issued during the time he was only crown pince, there would have been no names of his queens.

Lokaprakāśa Malla

Rājā Yoganarendra Malla did not leave behind him any legitimate issue for the throne. After his death at Chāṅgu on Wednesday in Kārttika śukla ekādaśī in N. S. 826 (1706 A. D.) his grandson Lokaprakāśa Malla (daugther Yogamatī's son) was enthroned on Thursday Kārttika kṛishṇa ekādaśī vṛiśchika saṅkrānti in N.S. 826.[2] In the same year he brought a few coins into circulation. The name of his mother Yogamatī is also inscribed on the 'Mohar' issued by him. He also introduced Mohar with date on both the sides. Except the Mohars issued by Lokaprakāśa Malla, no coins so far found have date inscribed on both sides. Lokaprakāśa Malla died of an attack of small-pox at midnight on Āśvina kṛishṇa 6 uparānt 7 Budhavāra (Wednesday).[2] He ruled only for 11 months.

Indra Malla

A day after the death of Lokaprakāśa Malla people were made to assemble and Indra Malla, the son of Yoganarendra Malla's sister Maṇimatī, was declared king. That day Lokaprakāśa Malla's body

1. *Itihāsa Saṁśodhana Maṇḍala, Pūrṇimā,* No. 6, pp. 39–40.

   Mr. E. H. Walsh has wrongly considered Yogamatī, the daughter of Yoganarendra Malla, to be his queen. The Mohar issued by Lokaprakāśa Malla had the date N. S. 826, but Walsh incorrectly read 827. Because of the mistake, he thought that Lokaprakāśa Malla followed Indra Malla. S. M. Joshi and D. R. Regmi and many other historians have proved it that Lokaprakāśa Malla was followed by Indra Malla, not *vice versa.*

2. Ibid.

was carried on a litter (*Khata*) for cremation; at that time he would have been 8 years and 6 months old. After a week Indra Malla was crowned on Āśvina kṛishṇa trayodaśī hasta uprānta chitrā nakshatra prīti yoga Budhavāra (Wednesday) ghaḍī 10½ to 13.[1] He died at 13 ghaḍī at the night of Chaitra śukla pūrṇimā in N. S. 829.[2] He ruled for about three years. Indra Malla assumed two names—Purandara Malla and Indra Malla. In fact, both these names belonged to God Indra.

Sukis of Purandara, issued in N. S. 820[3] and 826,[4] have been found. Besides, Yoganarendra Malla made Purandara Malla Ṭhākura witness to a Tāḍapatra (palm leaf). The palm leaf is dated N. S. 825 *Mārgaśīrsha kṛishṇa chaturthyāntithau.* It has a clay seal on it. On the seal is the legend *śrī* flanked by two figures of the moon. Below the legend *śrī* is an image of a tortoise.

As already stated, King Yoganarendra Malla had no legitimate son. So he might have adopted or tried to adopt his nephew Purandara Malla (Indra Malla). So in N. S. 820 he might have issued coin in Purandara Malla's name. After the death of Yogānarendra Malla, it seems a dispute about the question of succession arose between Purandara Malla and Lokaprakāśa Malla in which the party of the latter supported by courtiers came out successful. Thus Lokaprakāśa Malla became king. There was a gap of one forthnight since the death of Yoganarendra Malla and the date of Lokaprakāśa Mall's accession to the throne is a clear evidence of disturbances that occurred for the succession. But Lokaprakāśa Malla had a premature death and Purandara Malla (Indra Malla) was enthroned. The Suki of N. S. 826 was issued when he was king.

Not much authentic information about Purandara Malla is available.

COIN-TYPES

No. 1	Ruler : Yoganarendra Malla	Date : 805 N. S. (1685 A. D.)
Metal : AR	Denomination : Mohar	Shape : Round
	Size : 26.5 mm.	Weight : 5.454 gm.

1. *Ibid.*, No. 6, pp. 39-40.
2. *Itihāsa Saṁśodhan Maṇḍala, Pramana-Prameya-Seri'l*, 12, pp. 100-101.
3. S. M. Joshi has put the coin of Purandara Malla issued in N.S. 820 in the list of coins not yet deciphered, See *Nepālī Rāshṭrīya Mudrā*, p. 139.
4. D. R. Regmi, *Medieval Nepāl*, Part II, coin no. 19, p. 1033.

Obv. : Small square resting on a lotus flower inscribed within a larger square. Round these, two intersecting squares. In the central square, sword. In the two central squares, legend *Śrī Śrī Śrī Lokanātha.* Within the figure of the intersecting sqares, legend *Śrī Śrī Yoganarendra Malla Deva*; above an umbrella and below crescent and sun. Outside the figure, legend *Saṅgītārṇavapāraga.* Border of circle and flower buds.

Rev. : Eight-pointed figure. In central octagon, on pedestal, vermilion-casket *(sinamu)* with wreath *(āvaraṇa),* crescent and sun, shell and mace. Around, within the triangles, legend *Śrī Narendra Lakshmī Devī.* Outside the figure, legend *Śrī Nepāla Chūḍāmaṇi* date 805.[1] Border of circle and dots.

(Pl. I. 2)

No. 2	Ruler : Yoganarendra Malla	Date : 805 N. S. (1685 A. D.)
Metal : AR	Denomination : Mohar	Shape : Round
	Size : 26.1 mm.	Weight : 5.22 gm.

Obv. : Two intersecting triangles, forming a six-pointed star. In inner hexagon, sword with wreath, flower to upper left and legend "*Śrī 2*[3] *Lokanātha.*" In the points of the star and outside it, "*Śrī Śrī Jaya Yoganarendra Malla Deva.*"[4] Border of circle and dots.

Rev. : In central circle "*aṅkuśa*" (elephant goad) between "*ārsi*" (mirror) and "*sindūrdānī*" (vermilion casket), resting on a horizontal line (pedestal). Below the line, date 805; flowers in the field. The circle is enclosed in a "*bhupur*" (square figure with projections from the sides) together with legend "*Yoga Lakshmī Devī*" and moon and sun in the upper corners. Flowers in the field. All included in a circle and a border of wavy lines.

(Pl. I. 3)

1. Walsh, nos. 58 and 56, wrongly reads the date as 806.
2 The present coin belongs to Mr. G. L. Shrestha.
3 In describing the coin D. R. Regmi (pp. 1030–31 of "*Medievel. Nepāl*", Coin No. 14) has missed reading the "*Deva*" in the lower triangle and has given "*Śrī Śrī*" in place of "*Śrī* 2". S. M. Joshi, illustrating the coin in Pl. 14,1 (ख) has missed "*Śrī* 2 *Lokanātha*" and "*Deva*" from the Obv. and has added a non-existent "*Śrī*" to the Rev.
4. Ibid.

No. 3 Ruler : Yoganarendra Malla Date : 805 N. S. (1685 A. D.)

Metal : AR Denomination : Mohar Shape : Round
Size : 27.5 mm. Weight : 5.475 gm.

Obv. : As No. 1 above.

Rev. : As No. 1 above, with the exception of the Queen's name, which on this coin is *Śrī Śrī Jaya Lakshmī Devī* (instead of *Śrī Narendra Lakshmī Devī*).

(Pl. I. 4)

No. 4 Ruler : Yoganarendra Malla Date : 805 N. S. (1685 A. D.)

Metal : AR Denomination : Mohar Shape : Round
Size : 24.8 mm. Weight : 5.415 gm.

Obv. : Figure formed of two interlaced *svastikas*. In the central square thus formed, sword; in the top and central square, legend *Śrī 3 Lokanātha*. Legend commencing from the top left corner and reading horizontally across *Śrī Śrī Yoganarendra Malla Deva*. Outside the figure, legend *Saṅgītārṇavapāraga*. Border of circle and flower buds.

Rev. : A rhomboid intersected by two equilateral triangles. In central rhomboid so formed, on pedestal, vermilion-casket with wreath and an umbrella; on the left and right, shell and mace. Within the larger rhomboid, legend *Śrī Narendra Lakshmī Devī*. Outside the figure in bottom triangles, legend *Śrī Pratāpa Lakshmī Devī*. Above, in left and right triangles, crescent and sun. At the bottom, date 805.[1] Border of circle and dots.

(Pl. I. 5)

No. 5 As No. 4 above, but Size 24.6 mm.; Weight 5.067 gm.
No. 6 As No. 4 above, but Size 26.8 mm.; Weight 5.459 gm.
No. 7 Ruler : Yoganarendra Malla Date : 805 N. S. (1685 A. D.)

Metal : AR Denomination : Mohar Shape : Round
Size : 25.6 mm. Weight : 5.4 gm.

As No. 4 above, with the exception of the Reverse border, which is formed by wavy lines (instead of dots).

(Pl. I. 6)

1. Walsh, nos. 58 and 56, wrongly reads the date as 806.

No. 8 Ruler : Yoganarendra Malla Date : 805 N. S. (1685 A. D.)

Metal : AR Denomination : Mohar Shape : Round
Size : 25.9 mm. Weight : 5.455 gm.

Obv. : As No. 3 above.

Rev. : In central small square (9.5 mm.) a *kalaśa* resting on lotus flower; around it *śaṅkha* (conch-shell), 10–dotted *chakra* (wheel),[1] *gadā* (mace) and *padma* (lotus). The square inscribed within another square (19.0 mm.) ; on the left corner, 7–dotted flower with *ārasi* (mirror) and 8–dotted flower with *sindūradānī* (vermilion-casket)[2] on the right. Legend *Yoga Lakshmī Devī*. At the bottom, date 805. On the top, left and right crescents with dots. Dotted flowers in the field. Border of circle and wavy lines.

(Pl. I. 7)

No. 9 Ruler : Yoganarendra Malla Date : 805 N. S. (1685 A. D.)

Metal : AR Denomination : Mohar Shape : Round
Size : 26.2 mm. Weight : 5.365 gm.

As No. 8, but with slight difference in dies, as for example :

- size of squares respectively 8.5 and 17.0 mm.
- in the left and right corner six-dotted flowers;
- *chakra* with seven dots and very small circle;
- shape of letters and flowers slightly different.

(Pl. I. 8)

No. 10 Ruler : Yoganarendra Malla Date : 808 N. S. (1688 A. D.)

Metal : AR Denomination : Mohar Shape : Round
Size : 26.0 mm. Weight : 5.41 gm.

Obv. : As No. 4 above.

Rev. : Two intersecting quadrilaters with concave sides. In central octagon so formed, circle surrounded by eight petals, each petal containing three dots. Inside circle, vermilion-casket with wreath. Within the triangles, legend *Śrī Yoga Rakshmī Devī* and date 808 and outside *Śrī Narendra Rakshmī Devī*

1. Walsh, no. 57, mentions a 'standard' that does not exist.
2. Ibid.

(*Rakshmī* has been written in place of *Lakshmī*).[1] Border of circle and dots.

(Pl. I. 9)

No. 11 Ruler : Yoganarendra Malla Date : 820 N. S. (1700 A. D.)

Metal : AR Denomination : Mohar Shape : Round
Size : 25.6 mm. Weight : 5.407 gm.

Obv. : On reticulated surface, in centre, on pedestal sword with wreath of 25 dots; on the top nine-dotted flower with leaves, between crescent and sun. Legend in Newārī script, in five lines, in two inner columns of characters *Śrī Śrī Jaya Yoga-narendra Malla*. Legend in the four lines in outer columns, *Saṅgītārṇavapāraga*. Border of circle and dots.

Rev. : In centre, trident with wreath of 13 dots. The trident resting on a lotus; above it an umbrella. Legend in Devanāgarī script, in five lines of the two inner columns of characters, *Śrī Śrī Vīra Yoganarendra Malla*. Legend in four lines forming outer columns, *Nepāla Chūḍāmaṇi*.[2] At the bottom date 820. In each of the four corners three dots. Border of circle and dots.

No. 12 Ruler : Yoganarendra Malla Date : 820 N. S. (1700 A. D.)

Metal : AR Denomination : Mohar Shape : Round
Size : 26.0 mm. Weight : 5.343 gm.

Similar to coin No. 11 above, but with slight variations in dies.

Obv. : Wreath of 22 dots (instead of 25).

Rev. : (a) three additional dots in lower left and right corners;
(b) wreath of 14 dots (instead of 13).

(Pl. I. 10)

No. 13 Ruler : Yoganarendra Malla Date : 820 N. S. (1685 A. D.)[3]

Metal : AR Denomination : Mohar Shape : Round
Size : 26.1 mm. Weight : 5.4 gm.

1 Walsh and Joshi have mentioned *Lakshmī* for *Rakshmī*.

2. Walsh, no. 59, mentions *Nepāleśvara* in place of *Nepāla*.

3 [A Correctly 1700 A. D —*A. M. S.*]

71?0B

Similar to coin No. 11 and 12 above, but with slight differences in dies.

Obv. : Wreath of 24 dots.

Rev. : (a) Lotus buds in lower left and right corners.
(b) Wreath of 19 dots.

(Pl. II. 1)

No. 14	Ruler : Yoganarendra Malla	Date : 804 N. S. (1684 A. D.)
Metal : AR	Denomination : $\frac{3}{4}$ Mohar Size : 19.1 mm.	Shape : Square Weight : 3.96 gm.

(A few details have been spoilt by an artificial hole in the centre of the coin).

Obv. : On reticulated surface, an octagon (formed by two interlaced squares) containing in centre a sword with wreath under canopy; to left *aṅkuśa* (elephant goad) and to right *pāśa* (noose). In eight corners formed by the interlaced squares, legend : *Śrī Śrī Yoganarīndrasya.* Below, outside octagon, date *804.* All contained in square frame and marginal ornaments.

Rev. : In central circle *sinamu* or *kalaśa* (vase for offering) with wreath. Around circle, eight petals containing legend *Śrī Narendra Lakshmī Devī.* All surrounded by square frame and border of dots.

(Pl. II. 2)

No. 15[1]	Ruler : Yoganarendra Malla	Date : 804 N. S. (1684 A. D.)
Metal : AR	Denomination : Suka ($\frac{1}{2}$ Mohar) Size : 22.0 mm.	Shape : Round Weight : 2.5 gm.

Obv. : Divided by two lines in imitation of Persian characters. Above sun and legend *Śrī Śrī Ja–*; in the middle sword with

1. It should be noted that, on Obv. and Rev., *Jo* has been used instead of *Yo* in rendering the names of Yoganarendra and Yoga Lakshmī; furthermore the latter name is distorted La kshi mī.

It is in the collection of C. Valdettaro. My thanks are due to him for photograph and measurement.

wreath between *–ya Jogana–* and *–rendra Malla.* Flower in the field and, around, circle and border of dots.

Rev. : Square containing legend "*Joga Lakshmī Mahādevī*". Below date *804*, with figure "*4*" in Devanāgarī script. To left, right and above square, ornamental flowers. Circle and border of wavy lines.

(**Pl. II. 3**)

No. 16 Ruler : Yoganarendra Malla Date : 805 N. S. (1685 A. D.)

Metal : AR Denomination : Suka (½ Mohar) Shape : Round
Size : 22.6 mm. Weight : 2.648 gm.

Obv. : Similar to coin No. 15 above, but correct legend *Yo*, instead of *Jo*.

Rev. : Square with, in centre, a vermilion-casket rising from a lotus stem; to left and right legend *Yoga Lakshmī Devī*. Below date *805* and to left, right and above square, ornamental flowers. Circle and border of wavy lines.

(**Pl. II. 4**)

No. 17 Ruler : Yoganarendra Malla Date : 805 N. S. (1685 A. D.)

Metal : AR Denomination : Suka (½ Mohar) Shape : Round
Size : 21.0 mm. Weight : 2.67 gm.

Similar to No. 16 above, but with slight differences in the Persian characters and flowers; the flan is also somewhat smaller.

(**Pl. II. 5**)

No. 18[1] Ruler : Yoganarendra Malla Undated

Metal : AR Denomination : Suka (½ Mohar) Shape : Round
Size : 21.6 mm. Weight : 2.68 gm.

Obv. : Similar to No. 17

Rev. : In square vermilion-casket with wreath; four trefoiled petals outside; sides of square and legend distributed as follows : *Śrī* above square;

1. My thanks are due to Shyam Raj Dhoj who allowed me to take photograph of his coin.

Na re– inside square, in upper left and right corners;
–dra La–, below square, to left and right;
–kshmī De– inside square, in lower left and right corners;
–vi in exergue.
Circle and border of dots.

(**Pl. II. 6**)

No. 19	Ruler : Yoganarendra Malla	Undated
Metal : AR	Denomination : Suka (½ Mohar)	Shape : Round
	Size : 21.0 mm.	Weight : 2.62 gm.

Obv. : In central square lotus flower. Around it, eight interlaced petals; containing legend *Śrī Yoganarendra Malla* and the *ashṭa-maṅgala: śrīvats* (endless birth), *śaṅkha* (conch-shell), *chhatra* (umbrella), *matsya* (two fishes), *chāmara* (two crossed yak's tail fly-whisk), *kalaśa* (vase of holy water), *dhvaja* (banner) and *padma* (lotus). Circle and border of dots.

Rev. : A small squre, inscribed within another square. Within, smaller square, vermilion-casket with wreath; on the left and right corners crescents with dots. Above, legend *Śrī Śrī*; in the angles, *Jaya Rakshmī*. Below *Devī*. To left and right trefoiled petals. Circle and border of dots.

(**Pl. II 7**)

No. 20	Ruler : Yoganarendra Malla	Date : 805 N. S. (1685 A. D.)
Metal : AR	Denomination : Suki (¼ Mohar)	Shape : Round
	Size : 18.6 mm.	Weight : 1.3 gm.

Obv. : A square with four trefoiled petals round. In square, *aṅkuśa* (elephant goad) and legend *Śrī Śrī Yoga–*; below date 805. Legend formed by the central characters of the top and lateral trefoils, *–narendra* (in the lower trefoil) *Malla*; outer characters of top and lateral trefoils, *Udhārakaya yāo*[1] the letter *o* in the bottom trefoil. Circle and border of dots.

1. Misreading the last part of the legend as *Dayā Kara, pa–pa* (possibly *ya–ya*) and *ga*, Walsh (No. 60) rendered the first part as "Have pity" and could not catch the full sense of Yoganarendra's prayer to Lokanātha and Taleju : *Udhārakaya yāo* meaning, in Newārī, "God save us from calamity." Likewise he misread the date which is not 807, but 805.

Rev. : Five-pointed figure formed of a continuous line. In top three triangles and centre, legend *Śrī Śrī Śrī Lokanātha*; around and in two lower triangles, legend *Śrī Taleju Sahāya* (Taleju's aid). Dotted flowers in the field and, around, circle and border of dots.

(Pl. II. 8)

No. 21 Ruler : Yoganarendra Malla Date : 805 N. S. (1685 A. D.)

Metal : AR Denomination Suki (¼ Mohar) Shape : Round

Size : 18.6 mm. Weight : 1.292 gm.

Obv. : Square with four trefoiled petals around; inside *aṅkuśa* (elephant goad). And legend *Śrī Śrī Yoga*– ; petals contain the rest of the legend :
– *na* – above;
– *re* – to left;
– *ndra* – to right;
Malla below.
Date 805 inside square.

Rev. : As coin No. 20.

(Pl. II. 9)

No. 22 Ruler : Yoganarendra Malla Date : 805 N. S. (1685 A. D.)

Metal : AR Denomination : Suki (¼ Mohar) Shape : Round

Size : 18.4 mm. Weight : 1.313 gm.

Obv. : Similar to No. 21, but spelling *le*, instead of *re* in the King's name.

Rev. : Similar to No. 21.

(Pl. II. 10)

No. 23 Ruler : Yoganarendra Malla Undated

Metal : AR Denomination : Suki (1/4 Mohar) Shape : Round

Size : 17.6 mm. Weight : 1.225 gm.

Obv. : A five-pointed figure formed by a continuous line; within the topmost triangle *Śrī* and central pentagon, legend *Lokanātha*. Around legend *Śrī Śrī Yoganarendra Malla*. Circle and border of dots.

Rev. : Within central square, vermilion-casket with wreath. The figure surrounded by four trefoiled petals containing legend *Śrī Narendra Lakshmī Devī*. Circle and border of dots.

(Pl. II. 11)

No. 24 Ruler : Yoganarendra Malla Undated[1]

Metal : AR Denomination : Suki (¼ Mohar) Shape : Round

Size : 18.3 mm. Weight : 1.33 gm.

Obv. : Within central square a sword with wreath and, in upper corners, crescents with dots. It is surrounded by trefoiled petals containing legend *Śrī 2 Vīra Yoganarendra Malla.* Circle and border of dots.

Rev. : A five-pointed figure formed by continuous line; within the triangles, legend *Śrī Lokanātha.* In central pentagon, lotus flower; above crescents with dots. Outside the figure, flowers in the field. Circle and border of dots.

(Pl. III. 1)

No. 25[2] Ruler : Yoganarendra Malla Undated[3]

Metal : AR Denomination : Suki (¼ Mohar) Shape : Triangular

Size : 18.1 mm. × 19.3 mm. Weight : 1.30 gm.

Obv. : In centre sword with wreath; to left and right legend *Śrī Śrī Vī ra Yo ga* – ; below – *na re ndra* and one dot. Border of triangle and dots.

1. C. Valdettaro's note : it would be interesting to study the reasons for which all of a sudden, Yoganarendra Malla added to his name the epithet *Vīra*, which does not appear in other coins untill 820 N. S.; also Bhupālendra Malla of Kathmandu styled himself *Vīra* on a Mohar dated 820 N. S.

2. It is in the Valdettaro's collection. My thanks are due to him for photograph and measurements.

3. The absence of any date on this peculiar coin makes it difficult to guess the time of its issue though the appearance of *Vīra* along with the name would by itself tend to indicate a rather late date in the life of the Sovereign. This might also be confirmed by the appearance of the same triangular design in a copper plate. still affixed to a wall in the northern part of Mulchok, in the Royal Palace of Bhādgaon, bearing the date : "*Saṁvat 822 Mārgaśira kṛishṇa Navamyāntithau.*"

Rev. : In centre vermilion-casket with wreath and umbrella. On the left and right three letters and on bottom one. These letters, when joined together, become *Śrī Jaya Rakshmī Devī*. But *Ra* is written in place of *La*. Border of triangle and dots.

(Pl. III. 2)

No. 26 Ruler : Yoganarendra Malla Undated

Metal : AR Denomination : Dam (1/128 Mohar) Shape : Round
Size : 7.8 mm. Weight : 0.045 gm.

Obv. : *Śrī* between crescents with dots; below *Yo ga*.

Rev. : The obverse impression shows through.

(Pl. III. 3)

No. 27 Ruler : Lokaprakāśa Malla Date : 826 N. S. (1706 A. D.)

Metal : AR Denomination : Mohar Shape : Round
Size : 25.2 mm. Weight : 5.134 gm.

Obv. : Square, with smaller square inscribed diagonally, and, in centre, a third square containing sword with wreath between crescents with dots. Inner legend, *Śrī Śrī Śrī Kalunāmaya*; each letter between three-petal flowers. Outer legend, *Śrī 2 Lokaprakāśa Malla Deva*; three letters between like arrows (or flower). Border of circle and dots.

Rev. : Two interlaced equilateral triangles, with central scolloped comparment with four dots, containing trident with ornamental scrolls. Legend *Śrī Śrī Yogamatī Devī*; below date *826*[1]; To left mirror and to right vermilion-casket. Around, three petalled flowers. Border of circle and dots.

(Pl. III. 4)

No. 28 Ruler : Lokaprakāśa Malla Date : 826 N. S. (1706 A. D.)

Metal : AR Denomination : Mohar Shape : Round
Size : 26.1 mm. Weight : 5.44 gm.

Obv. : Similar to No. 27, but spelling *Kalunāmaya* (कलुनामय) in place of "*Karuṇāmaya* (करुणामय)".

1. Walsh copied the wrong date 827 N, S. from Smith, *IMC*, 1906, vol. I, p. 288.

Rev. : Similar to No. 27.

(**Pl. III. 5**)

No. 29 Ruler : Lokaprakāśa Malla Date : 826 N. S. (1706 A. D.)[1]

Metal : AR Denomination : Mohar Shape : Round

Size : 25.7 mm. Weight : 5.247 gm.

Obv. : In centre small square containing sword with wreath between crescents. This square is enclosed in another larger square and legend *Śrī 2 Pra kā lla.* These two squares are enclosed by a third square, and legend *Ja ya De va* ; each letter between flowers. Outside the larger square, above an umbrella between crescent and sun. *Lo sa* to left and *ka ma* to right; bottom date *826*. The full legend reads *Śrī 2 Jaya Lokaprakāśa Malla Deva 826*. Border of circle and dots.

Rev. : *Śrī Śrī Yogamatī Devī 826* as on coin No. 27.

(**Pl. III. 6**)

No. 30 Ruler : Lokaprakāśa Malla Date : 826 N. S. (1706 A. D.)

Metal : AR Denomination : Mohar Shape : Round

Size : 26.2 mm. Weight : 5.475 gm.

Obv. : Similar to No. 29.

Rev. : A hexagon formed by two interlaced equilateral triangles. In centre scolloped figure containing trident with ornamental scrolls. Inside the triangles, legend *Śrī Karunāmaya*. Outside the triangles, legend *Śrī Śrī Yogamatī*. Border of circle and dots.

(**Pl. III. 7**)

No. 31[2] Ruler : Lokaprakāśa Malla Undated

Metal : AR Denomination : Suki ($\frac{1}{4}$ Mohar) Shape : Bound

Size : 18.0 mm. Weight : 1.2 gm.

Obv. : In central square sword with wreath; above to left and right crescents with dots. Outside the figure, letters forming legend *Śrī Jaya Lokaprakāśa Malla Deva*. Border of circle and dots.

1. Of all the Nepali coins available up to the present time, this is the only one that has a date on both sides.
2. For photograph and measurement my thanks are due to C. Valdettaro who possesses this coin.

Rev. : In central circle lotus flower. The figure surrounded by six petals, each containing a letter of the legend *Śrī Karuṇāmaya.* Border of circle and dots.

(Pl. III. 8)

No. 32 Ruler : Indra Malla Undated

Metal : AV Denomination : Dam (1/128 AV Mohar) Shape : Round
Size : 6.8 mm. Weight : 0.045 gm.

Obv. : Above *Śrī* between crescents with dots. Below *Indra.*

Rev. : The obverse impression shows through.

(Pl. III. 9)

No. 33[1] Ruler : Indra Malla Date : 826 N. S. (1706 A. D.)

Metal : AR Denomination : Mohar Shape : Round
Size : 25.9 mm. Weight : 5.511 gm.

Obv. : In central square, sword with wreath under an umbrella; to left and right legend *Śrī Śrī Lokanātha.* Outside the square: above *Śrī Śrī* between crescent and sun; to left and right, legend *Jaya Indra Malla* ; at the bottom *De va* from the middle of which a branch bifurcates into two flowers. Border of circle and dots.

Rev. : In square figure with circularly prejecting sides, trident with wreath resting on lotus; to the left a mirror (*ārsī*) and to the right a vermilion-casket (*sindūrdānī*,. At the top "*Śrī*" between five-dotted flowers; to left and right, legend "*Bhāgyavatī Devī*"; at bottom date *826*. Outside joint semi-circles with three dots. Border of circle and dots.

(Pl. III. 10)

No. 34 Ruler : Indra Malla Date : 826 N. S. (1706 A. D.)

Metal : AR Denomination : Mohar Shape : Round
Size : 25.9 mm. Weight : 5.42 gm.

1. Walsn has ommitted *Deva* in the legend and some details (moon, sun and flowers). Furthermore he has given "*Bhāgavatī*" for *Bhāgyavatī*. See ibid, p. 735, Coin No. 61.

Obv. : Similar to No. 33, but outside the square, one dot near each of the four corners.

Rev. : Similar to No. 33.

(Pl. III. 11)

No. 35 Ruler : Indra Malla Date : 826 N. S. (1706 A.D.)
Metal : AR Denomination : Mohar Shape : Round
Size : 25.6 mm. Weight : 5.217 gm.

Obv. : Similar to No. 33.

Rev. : Similar to No. 33, but no five-dotted flowers at the sides of *Śrī*.

(Pl. III. 12)

No. 36 Ruler : Indra Malla Date : 826 N. S. (1706 A. D.)
Metal : AR Denomination : Mohar Shape : Round
Size : 26.1 mm. Weight : 5.27 gm.

This coin appears slightly different from the preceding three coins.

Obv. : Above the sword, three petals in place of umbrella, and in between letters *De va* three dots in place of flower. Otherwise similar to No. 33.

Rev. : Similar to No. 35, but outside the joint semi-circles a bud with two leaves in place of three dots. Scrolls with trident and shape of 6 are also slightly different.

(Pl. IV. 1)

No. 37 Ruler : Indra Mall Date : 826 N. S. (1706 A. D.)
Metal : AR Denomination : Mohar Shape : Round
Size : 26.3 mm. Weight : 5.45 gm.

Obv. : Similar to No. 36.

Rev. : Similar to No. 35.

(Pl. IV. 2)

No. 38 Ruler : Indra Malla Date : 826 N. S. (1706 A. D.)
Metal : AR Denomination : Suka ($\frac{1}{2}$ Mohar) Shape : Round
Size : 20.8 mm. Weight : 2.655 gm.

Obv. : Divided by two lines in imitation of Persian characters. Above, legend *Śrī 2 Loka –*; in the middle sword with wreath between *– nā (tha)*,[1] *Śrī 2 Jaya*; below *Indra Malla*. At the top and bottom, four-dotted flowers. Border of circle and dots.

Rev. : Within central square, *sindūradānī* (vermilion-casket; to left and right legend *Śrī Bhāgyava –* ; outside the figure above *tī* ; to left and right *Devī* ; bottom date *826*. Around, dotted flowers. Border of circle and wavy lines.

(Pl. IV. 3)

No. 39[2] Ruler : Indra Malla Undated

Metal : AR Denomination : Suki (¼ Mohar) Shape : Round
Size : 17.0 mm. (from the photos) Weight : unrecorded

Obv. : In central square sword with wreath and in upper corners, crescents with dots. The square surrounded by trefoiled petals. Above, legend *Śrī Śrī*; to left and right, *Jaya Indar*; bottom *Malla*. Border of circle and wavy lines.

Rev. : Divided by two lines in imitation of Persian characters. Above, *Śrī Śrī*; in centre *chakra* (wheel) and legend *Lo ka –*; below *– nā tha*. Border of circle and dots.

(Pl. IV. 4)

No. 40[3] Purandara Malla (Indra Malla) Date : 820 N. S. (1700 A. D.)

Metal : AR Denomination : Suki (¼ Mohar) Shape : Round
Size : 18.4 mm. Weight : 1.315 gm.

Obv. : A hexagon formed by two interlaced equilateral triangles. In centre sword with three dots at the top; to left *aṅkuśa* and *vāna* (elephant goad and arrow); to right *pāśa* and *dhanuśa* (noose and bow). Inside the triangles, legend *Śrī Śrī Purandara*. Below the triangles *Malla*. On the four sides dotted flowers. Border of circle and dots.

1. The letter *'tha'* (थ) is missing.
2. My thanks are due to Mr. Hemraj Shakya who allowed me to take photographs of his coin three years ago. Now he said that the coin is in the possession of the Archaeological Department of Kathmandu.
3. This coin was issued by king Yoganarendra Malla, See page 4.

Rev. : In central circle trident resting on pedastal; below date 820. The figure surrounded by eight petals containing three dots each. One more dot at the joint of each petal. Border of circle and wavy lines.

(Pl. IV. 5)

No. 41 Ruler : Purandara Malla (Indra Malla) Date : 826 N. S. (1706 A. D.)

Metal : AR Denomination : Suki ($\frac{1}{4}$ Mohar) Shape : Round
Size : 17.8 mm. Weight : 1.23 gm.

Obv. : Similar to No. 40.

(Pl. IV. 6)

Rev. : Similar to No. 40, but date is *826*.

LIST OF COINS

I am giving hereunder the list of coins published by E. H. Walsh, Satya Mohan Joshi and D. R. Regmi. Though there may be some minor differences in the size and weight of the various coins. Regmi has listed most of the scarce coins.

Metal and Denomination		*Date in N. S.*	*My Nos.*	*Walsh's coin Nos.*	*Joshi's pp., coin and pl.*	*Regmi's coin Nos.*
AR	Mohar	805	1	58	99–100(IV) & 14,1(क)[1]	×
AR	Mohar	805	3	×	100 (VI) & ×	13
AR	Mohar	805	4–6	56	99 (III) & ×	×
AR	Mohar	805	7	×	×	×
AR	Mohar	805	8–9	57	99 (II) & 14,2 (क)	×
AR	Mohar	808	10	55	100 (V) & 14,2 (ख)	×
AR	Mohar	820	11	×	×	×
AR	Mohar	820	12	59	98 (I) & 14,3	×
AR	Mohar	820	13	×	×	×
AR	$\frac{3}{4}$ Mohar	804	14	×	×	×
AR	$\frac{1}{2}$ Mohar	804	15	×	×	×

1. Joshi has given the photo of the Rev., bearing the legend *Śrī Nepāla Chūḍāmaṇi, Śrī Narendra Lakshmī Devī 805* but has wrongly written *Śrī Nepāla Chūḍāmaṇi, Śrī Jaya Lakshmī Devī 805* See Joshi pl. 14, 1 (क).

Joshi has given the photo of Yoganarendra Malla's Mohar on pl. 14, 1 (ख) The Mohar is similar to Śrīnivāsa Malla's coin illustrated by Walsh (No. 54, pl. V, fig. 4). Regmi has written in detail about it; see it see pp, 103–31, coin No. 14.

Metal and Denomination	*Date in N. S.*	*My Nos.*	*Walsh's coin Nos.*	*Joshi's pp., coin and pl.*	*Regmi's coin Nos.*
AR ½ Mohar	805	16–17	×	111 & ×	15
AR ½ Mohar	Undated	18	×	×	×
AR ½ Mohar	Undated	19	×	×	×
AR ¼ Mohar	805	20	60	×	×
AR ¼ Mohar	805	21	×	100–101 & ×[1]	×
AR ¼ Mohar	805	22	×	×	×
AR ¼ Mohar	Undated	23	×	×	16
AR ¼ Mohar	Undated	24	×	×	×
AR ¼ Mohar	Undated	25	×	100[2] & ×	×
AR 1 Dam	Undated	26	×	×	×
AR Mohar	826	27	62	×	×
AR Mohar	826	28	×	101 (I) & 15,1(क)	×
AR Mohar	826	29	×	×	×
AR Mohar	826	30	×	×	17[3]
AR ¼ Mohar	Undated	31	×	×	×
AV 1 Dam	Undated	32	×	×	×
AR Mohar	826	33[4]	61	102 (I) & 15,1 (ख)	×
AR Mohar	826	34	×	×	×
AR Mohar	826	35	×	×	×
AR Mohar	826	36	×	×	×
AR Mohar	826	37	×	×	×
AR ½ Mohar	826	38	×	×	×
AR ¼ Mohar	Undated	39	×	×	18[5]
AR ¼ Mohar	620	40	×	139 (I) & ×	×
AR ¼ Mohar	826	41	×	×	19

Mr. Joshi has wrongly mentioned the coin of Lokaprakāśa Malla having the name of his grandfather Yoganarendra Malla.

1. Joshi has mentioned a Suki of Yoganarendra Malla dated 804 N. S., but has not illustrated the coin. See Joshi pp. 100-101.

2. Joshi has taken from Perceval Landon, Appendix XXV, p. 323, No. 12.

3. Regmi has not read *Śrī Śrī Śrī* on the reverse; his reference is therefore doubtful.

4. Perceval Landon has mentioned the Mohar of Indra Malla, without *Jaya* on the obverse. See Landon, Appendix XXV, p. 326, No. 14.

5. Regmi has failed to read the letter इ *(I)*, *ibid*, p. 1033.

Obv. : Similar to the reverse of Śrīnivāsa Malla's coin. In central circle trident and legend *Śrī Jaya Loka* (on the basis of worn-out letters). Inner part of *maṇḍala*; *Prakāśa Malla Deva* and date *826*.

Rev. : In centre scolloped circle; sword with wreath (*ābharaṇa*) and legend *Śrī Lokanātha*. Outside the circle, legend *Śrī Jaya Vīra Yoganarendra Malla Deva*.[1]

The above-mentioned coin does not belong to Lokaprakāśa Malla but to Rājyaprakāśa Malla.[2] In most of the coins of this type the letters are seen in worn-out condition. And also a lot of them have been procured in which the silver content is low. Joshi has written that *Śrī Jaya Loka* has been rubbed off but actually the letters *Śrī 2 Jaya Rājya* have been worn-out. Also the date he had read as 826 for 865. Likewise Walsh had read the date 856 for 865.

ABBREVIATIONS AND BIBLIOGRAPHY

Walsh E. H. Walsh, The Coinage of Nepal, *JRAS*, London, July 15, 1908.

Landon Perceval Landon, *Nepal*, Appendix XXV, Coinage, Constable and Co., London, 1928.

Joshi Satya Mohan Joshi, *Nepālī Rāshṭrīya Mudrā*, Bakunbahal, Lalitpur, Nepal 2017 V. S.

Regmi D. R. Regmi, *Medieval Nepāl*, Part II, Firma K. L. Mukhopadhyay, Calcutta, 1966.

Saṁśodhana Maṇḍala *Pūrṇimā* and *Pramāṇa-Prameya*, 10/452, Mahabandha, Kathmandu, Nepal.

1. See Joshi, p. 102, coin No. 2.
2. See Rājyaprakāśa Malla's Mohar of Walsh No. 70; pl. VI, fig. 7.
3. I heartily thank Principal Shyam Raj Dhoj Joshi for his kindly translating for me the historical introduction of this article.

MISCELLANEA

1

WRONGLY READ CITY NAME AYODHYA ON COINS

R. R. Tripathi[1] publishes a coin, no. 478, of Allahabad Museum as follows :

Obv. : Legend *Ajudhe* or *Ajadhe* or *Ajidhe* in the Brāhmī characters.

Rev. : Obliterated.

He also says[2] that two more coins, nos. 425 (a) and 640, occur in the coin-collection of this Museum.

These three coins, nos. 478, 425 (a) and 640, weigh 1·005, 1·570 and 0·764 grammes respectively.

Tripathi is not certain on their attribution as is clear from his statement : "The letters of the legend, when read together sound it to be the city of Ayodhya but no definite conclusion could be arrived at in the absence of a more reliable evidence." Bela Lahiri takes them to be the city coins of Ayodhya.[3]

Only the published and illustrated coin no. 478, of this type as Tripathi says, contains complete legend and this on palaeographical ground is ascribed to the early 2nd century B. C. On this specimen[4], the first is a simple vertical line and to consider it as the letter *a* it is entirely a subject of imagination since we know that in this period it was formed by a vertical line and angles or arches added to it in the opposite direction at its left. Besides this vertical, there is a wavy line, drawn as . The bottom oblique spoke of this wavy line cannot be regarded

1. *JNSI*, XXVIII (II), p. 210.
2. Ibid.
3. She writes : "Now, coins bearing the names of cities were probably a little earlier than those bearing the names of rulers, since at Ayodhya and Kausambi the city issues were followed by the dynastic issues," *Seminar Papers on the Local Coins of Northern India*, p. 29.
4. *JNSI*, XXVIII (II), pl. VI. 10.

as the sign of *ukāra* of the letter *ju* because no where the stroke of this vowel is appended obliquely but vertically with the letter *ja*. This wavy line is also read as *ji*. Again this oblique stroke cannot be considered as the mark of medial *i* because for this in no case the stroke is annexed at the bottom of the letter *ja*. Following to this wavy line is a vertical line joined at its middle by a small horizontal stroke. Here, too, these lines may not be taken as the letter *dhe*. The Brāhmī letter *dha* was inscribed as ᗡ or, sometimes D. But on this coin the arch is absent.

The small stroke appended to the second vertical line seems to be a taurine. Thus this symbol can be drawn here as

.

Since the findspots of these coins are not reported these coins cannot be attributed to Ayodhya. The occurrence of these pieces in the Allahabad Museum, possibly, suggest them to have been found from the vicinity of Allahabad. Hence, at present, they may be kept in the category of the uniscribed coins of Kauśāmbī.

Nisar Ahmad

2

ON SOME REPOUSSE COINS

Prayag Dayal[1] describes four repousse coins, struck on the Kushāṇa and Gupta models, of the coin cabinet of the Lucknow Museum. They are made of gold.[2] Their other details as follows :

No. 1

It "is a thin circular piece stamped with a device showing inside a beaded circle, a figure of the style of King Samudragupta as shown on his coins of standard type. The king stands facing to left and holds a bow in the left hand. The Garuḍa Standard is to his right. On his left appears the letter-which

1. *NS*, XLIV, p. 12 N.

2, A. K. Srivastava, Numismatic Officer, State Museum, Lucknow, informs me, 'All the coins discussed there in relate to gold,' vide his *D. O.* no., 2386/II-4/71 (21) dated, Feb. 23, 1972.

probably stands for the initial of the ruler. Weight 12 grains, size 9 inches."[1]

Nos. 2-4

"These three tokens show some goddess (perhaps Pārvatī) standing by the side of a bull inside a beaded circle. The idea seems to have been borrowed from the coins of Vāsudeva, Śiva and bull type. These might have been worn as charms to ward off the evil eye. They weigh 12-14 grains and measure ·8--·85 inches."[2]

On coin no. 1 Prayag Dayal does not identify the object held by the king in his right hand. To me it seems to be a noose. Again the alphabet inscribed outside the bow in the right field, which is not read by him, is the letter *sa*. Further, the representation of the standing figure of the king shown wearing Kushāṇa coat and trousers and holding bow in his left hand, particularly the latter, suggest that this coin was issued on the model of the archer type of Samudragupta and it is certainly unwarranted to say that it has "a figure of the style of King Samudragupta as shown on his coins of standard type[1]". It may be mentioned here that the noose in the *r.* hand of the king is the unique feature of this coin.

On coin nos. 2-4, Prayag Dayal identifies the female deity but on nos. 2 and 3 the represented divine figure seems to be a male deity and the occurrence of the bull on them proves him Śiva. It can also be noted that the devices drawn on coin no. 2 can be recognized well but those on nos. 3 and 4 are made very crudely and therefore it does not seem to be more probable that these coins were issued by the same king. Prayag Dayal also suggests that the metallic pieces nos. 2-4 "might have been worn as charms to ward off the evil eye" but undoubtedly they are almost uniform in weights and sizes and manufactured by technique employed for the minting of the coins. Therefore, these pieces can well be regarded as the coins.

Since the coins of the repousse technique with the same measurements are known to have been issued only in the region of South Kosala, these coins have to be attributed to this locality. It would not be out of place to say that the occurrence of these coin in a museum of North India cannot be proposed as an argument against the suggested attribution as one repousse

1. *NS*, XLIV, p.12N., no. 2. Ibid, nos. 3-5.

coin bearing the name of Mahendrāditya, a ruler of South Kosala, too is known in the same coin cabinet.

The evidences in regards to the coin no. 1 that it was minted on the model of the obverse of a type of the coins of Samudragupta, contained the initial *sa* of the name of the king and belonged to the area of South Kosala suggest that this coin was issued by a South Kosalan ruler either in his own name which was initialled with the letter *sa* and for this he borrowed the devices of one of the Gupta types or in the name of his overlord Samudragupta. But here the second possibility suits with the known fact of the contemporaneous history. We know from the testimony of Allahabad Pillar Inscription of Samudragupta that he defeated and captured King Mahendra of South Kosala and later on handed over his kingdom to him. So Mahendra naturally became the feudatory of Samudragupta. Thus we are right to presume that the need of the region at this time demanded the striking of the currencies and its ruler Mahendra favoured to put the initial of his overlord Samudragupta. Here we may say that this feature is not unique in the history of ancient Indian Numismatics because we know that the Kushāṇa feudatory of Samudragupta too issues these coins in the name of the overlord Samudragupta.[1]

If our conclusion that the coin no. 1 was struck, on the Gupta model, by a Kosalan ruler during the 3rd quarter of the fourth century A. D. in the name of the Gupta overlord is accepted, it can also be suggested that the coins nos. 2-3, for which the entire Kushāṇa devices of one of the reverse types were adopted and as that the coin no. 3 had the crude patterns, were issued by the different kings flourishing in this region in the latter half of the 2nd century A. D. as the Kushāṇa feudatories. The representation of the devices on the coin no. 4 though apparently appear to have been influenced by the Kushāṇa coins but the existence of the female goddess along with *nandi* certainly suggest to have been evolved from the coin nos. 2-3 of this region. The depiction of Pārvatī on this coin indicate it to have been issued by a independent king of this region. Since its devices are borrowed from the coins issued in the latter half of 2nd century A. D. this coin can be dated to sometime in the third century A. D.

Nisar Ahmad

1. Altekar, A. S., *The Coinage of the Gupta Empire*, p. 52, no, 13, pl. II. 11

III

WEIGHTS AND MEASURES IN THE AMARAKOSHA

The Vaishyavarga of *Amarakosha*[1] has a brief mention of weights and measures. But unlike the other literary sources, the *Amarakosha* gives no place to certain pedantic weights found in the traditional lists, such as in the Manusmriti, the Arthasastra and the Yājñavalkya etc. Thus, in the *Amarakosha* there is no mention of *ṭrishreṇu*, *likshā* etc.[2] The list begins with *guñjā* which is the first unit for all practical use.

The list of weights and measures is classified in three categories, i.e., *yautava*, *druvayava* or *dravayava* and *pāyya*. Apparently to be synonyms, they denote weights, measures of capacity and linear measurements.[3] In the same verse *māna* has been described as of three types—*tulā*, *aṅguli* and *prastha*, The *tulāmāna* is associated with weights (*yautava*) ; *prastha* mostly with the measures of capacity (*dravayava*) and *aṅguli* with *pāyya*. There is no further reference to the linear measurement in the *Amarakosha*.

The *guñjā* is the primary unit (*ādya*) of weights. Kshīrasvāmi explains *ādye* as *mukhya*. Further it is stated that 16 *māsakas* constitute 1 *akshya* or *karsha* and 4 *karshas* make 1 *pala*. According to Manu and Yājñavalkya the *karsha* and *suvarṇa* were identical and 4 such units constituted 1 *pala*. The *māsha* in the earlier lists is a weight specified as a unit of gold coin also. Thus, they denoted gold coins as well as a weight to weigh precious commodities, particularly to be used by goldsmiths. Besides the weight of the gold *karsha*, the *karsha* of silver, as well as of copper are also mentioned.[4] But while the silver *karsha* is denoted as *kārshāpaṇa* the copper is designated as *paṇa* only. It is however known that in day to day use *karsha*, *kārshāpaṇa* and

1. *Amarakosha*, II. 9. 85-89
2. *JNSI*, Vol, XXV, pt. II, p. 141 ; B. Srivastava, *Trade and Commerce in Ancient India*, p. 197.
3. Hemachandra has associated *yautaua* with *tulā*, *dravayava* with *kudava* and *pāyya* with *hasta* etc. *Abhidhāhachintāmaṇi*, III, 537.
4. *Amarakosha*, II. 9. 88. *Karshasambandhināpaṇayate vyavahīyate anena rūpyarūpakena sa kārshāpaṇah. Karshaḥ pramāṇsya kārshikah.* Kshīraswāmī.

paṇa were identical denominations of different metals. The other noteworthy point to be noted in this context is in the indication that in the Kuru country gold *pala* was known as *kuruvista* or *vista.* Some other texts though mention two types of *mānas*, kalinga and Māgadha,[1] this is the first text which refers to *Kurumāna* with special reference to *Kuruvista.*[2]

The specification of heavier weights are given as follows :

100 *palas*	=	*tulā*
20 *tulā*	=	1 *bhāra*
10 *bhāra*	=	1 *āchita, śākata*[3]

There are some measures of capacity (*pramāṇa*) described in the text. But besides the names of denominations of measures, such as *ādhaka, droṇī, khārī, vāha, naikunchaka, kudava, prastha*[4] etc., there is no specific mention of their respective unit of capacity. It is however indicated in the text that such units of capacity had several smaller units, such as *pāda.* Thus, there *pādaādhaka, pādadroṇī, pādakhārī*[5] etc. It appears from the word *vantaka*[6] that the *pāda* had further smaller divisions, but there definite units are not described in the text.

Balram Srivastava

1. *Amarakosha,* II. 9. 89. Kshīraswāmī explains *kuruvista* as *Kvrudeśe prasidhovistah.*
2. *Sārangadharasanhitā,* I. i. 14-43.
3. *śakaṭabhārstatotiriktopyāchita eyeti.* Kshīrasvāmī.
4. For further details about ādhaka, khārī etc. see *India as known to Pāṇini,* pp. 253-254 ; *Trade and Commerce in Ancient India,* pp. 199-200.
5. *Amarakosha,* II. 9. 89 and also the *Vanyaghaṭika* commentary on the verse.
6. *Aṅsabhāge tu vanṭake, Amarakosha,* II. 9. 89,

IV
A HOARD OF THE GUPTA GOLD COINS FROM THE RAJAGHAT EXCAVATIONS
[Pl. IV]

The ancient site, Rajaghat, which is situated on the eastern outskirt of the city of Varanasi in Uttar Pradesh, is excavated during the recent past.[1] From a levels of its period IV, dated between 300 A. D. to 700 A. D. by the excavators, a small terracotta pot containing four gold coins of the Imperial Guptas along with some small thin pieces of the gold has been unearthed in the session of 1963-4.[2] These coins are the issues of the three Gupta kings : Chandragupta II, Kumāragupta I and Skandagupta. Among them, two have the name of the former and each of the rest two has the name of the last two mentioned king.

These are described as follows :

Coin No. 1

Issuer : Chandragupta II ; Trench : RGT×IB ; Layer : 4 ; Locus : ×′0×3·00-3·45 : Acc. Reg. No. : 132 ; Metal : gold ; Shape : round ; Weight : 7·7834. gms.

Obv. : King standing l., nimbate, wearing Kushāṇa coat and trousers, but wearing helmet ; earrings, necklace and armlets on his person. He holds arrow in his *r.* hand and double curved bow at the top in *l.* hand with bow string inside. The Garuḍa standard is behind his *r.* hand. The name of the king *Chandra* is written vertically under *l.* arm. Circular legend *Deva Śrī Mahārājādhirāja* at the right.

Rev. : Within dotted border goddess seated on throne, nimbate, legs handing down wearing a *sārī*, an upper garment, earrings, necklace, armlets and a semi-circular pearl ornament on the forehead. Her feet rest on a circular mat. Back of the throne is visible, She holds cornucopiae in his left hand and scatters gold coins by her *r.* hand. Legend *Śrīvikramaḥ*. Symbol

[Pl. IV. 7]

1. The site was excavated by the Dept. of Ancient Indian History, Culture and Archaeology of the Banaras Hindu University under the direction of Prof. A. K. Narain with the assistance of Sri T. N. Roy. I am thankful to both of them for handing over the coins to me for study and also for some other information.

2. *IAR*, 1963-4, p. 59, pl. XL B.

Coin No. 2

Issuer : Chandragupta II ; Trench : RGT×IB ; Layer : 4 ; Locus : ×'0×3·00-3·45 ; Acc. Reg. No. : 131 ; Metal : Gold ; Shape : round ; Weight : 7·7504 gms.

Obv. : King standard to *l.*, nimbate, wearing Kushāṇa coat and *dhotī*, bare headed, necklace and armlets on his person, holding a double curved bow by its top in the *l.* hand with bow string inside and arrow in *r.* hand. Garuḍa standard behind his *r.* hand. Vertical legend *Chan[dra]* under *l.* arm ; the circular legend out off the flan.

Rev. : Goddess Lakshmī cross legged seated on lotus, nimbate, wearing earrings, necklace and armlets, holding probably noose in his *r.* hand and lotus in her *l.* hand, part of the symbol out off the flan. Legend *Śrī Vikramaḥ.* **(Pl. IV. 8)**

Coin No. 3

Issuer : Kumāragupta I ; Trench : RGT×IB ; Layer : 4 ; Locus : ×'0×3·00-3·45 ; Acc. Reg. No. 133 ; Metal : Gold ; Shape : round ; Weight : 7·7204 grs.

Obv. : King standing to *l.*, nimbate, wearing Kushāṇa coat and *dhotī*, bare headed, necklace and armlets on his person, holding arrow in his *r.* hand and bow by its middle with string out side in his *l.* hand, Garuḍa standard behind his right hand ; vertical legend *Kumāra* out side the bow-string, the circular legend is out off the flan.

Rev. : Lakshmī cross legged seated on lotus, holding noose in *r.* hand and totus in *l.* hand. Legend truncated, part of the symbol is out off the flan. **(Pl, IV. 10)**

Coin No. 4

Issuer : Skandagupta ; Trench : RGT×IB ; Layer : 4 ; Locus : ×'0×3·00-345 ; Acc. Reg. No. : 130 ; Metal : Gold ; Shape : round ; Weight : 8·9677

Obv. : King standing to *l.*, nimbate, wearing Kushāṇa coat and *dhotī*, bare headed, necklace, earring and armlets on his person, holding double curved bow at the top in his *l.* hand with bow string inside and arrow in his *r.* hand. Garuḍa standard behind his *r.* hand. Vertical legend under his left arm *Skanda* ; circular legend starting from I o'clock *Parahataka......* (*Śrī Kramadityaḥ*).

Rev. : Lakshmī cross legged seated on the lotus holding noose in her *r.* hand and lotus in *l.* hand, symbol ; Legend *Kramādityaḥ.* **(Pl. IV. 9)**

Nisar Ahmad

V

JALER, JALESAR OR JAGNER ?

Nelson Wright and Whitehead had read the mint-name on Jahāngīr's coins dated 1031 A. H. in the Calcutta Museum (No. 685) and the Lahore Museum (No. 1017) as JALER, but both were unable to locate the position of the mint-town. P. L. Gupta tried to read the name as Hāpur[1] to which C. R. Singhal expressed serious doubts and his arguments against Gupta's reading are quite cogent. Singhal published another similar coin and read the mint-name as JALESAR which he identified with JALESWAR or JELLASORE in Balasor district of Orissa.[2]

I, however, feel that the mint-name may better be read as JAGNER because the stroke for گ is visible over ج and the dot for ن under the figure ۳ of the date ۱۰۳۱.

JAGNER is an old name of the present JANER, a small village situated about 10 km. north of Moga on road to Zira, near the high bed of the Sutlaj in district Ferozpur, Panjab. JANER is situated on a huge mound which has yielded coins ranging from the Kushāṇa period to the recent times.[3] Even now any casual visitor may pick up old coins from the mound and the surrounding fild. The extensive mound is indicative of its past glory and importance. It is, therefore, no wonder if it was made a mint-town by Jahāngīr.

Devandra Handa

1. *JNSI, XI*, p. 70.
2. *JNSI, XII*, p. 151.
3. *CASR, XIV*, pp. 67-69.

TECHNICAL SECTION

A METALLURGICAL NOTE ON GUPTA PERIOD GOLD COINS FROM RAJGHAT (VARANASI) EXCAVATIONS

H. C. Bharadwaj & S. Misra

Introduction :

Gold was among the first metals to be explored and used by man. In the beginning the metal was mainly obtained by paaning and washing of alluvial deposits. During Harappan period, Circa 2300 B.C., gold was commonly used for jewellery in the form of beads, pendents, armlets, brooches, needles, conical caps, etc. The light colour of these objects is due to sizeable percentage of silver in them. Probably toese were fashioned from electrum, the natural gold-silver alloy of variable composition. The gold for these objects appears not to have been obtained by panning and washings, but must have been mined from rich deposits like those in Mysore, where the gold and electrum nuggets may have been plentiful in those days.

Emergence of regular coinage in the west is dated about 700 B.C. and this coinage is in gold. No gold coins contemporary to this period have been found in India. However, there are some literary evidences in Vedic and later Vedic period of some sort of metal pieces named as 'Suvarṇa', Śatamāna, Nishka, and Hiraṇya-pinda etc. minted in gold, electrum and silver.

In India gold coinage as a clear and logical monetary system first emerged during Kushāṇa period. The Kushāṇa gold *dīṇāra* is comparable to Raman gold aureus. The Gupta gold coins succeed the Kushāṇa's coinage and bear their influence. Nevertheless they are supposed to have their own evolution and are considered as the finest expressions of Indian art on the one hand, and technological excellence on the other.

Excavation at Rajghat have yielded four gold coins of Gupta period and we have tried to examine these coins for their gold content and have examined one of them (Sr. No. 1, Table I, and

plate V, Fig. 1) metallcgraphically. This is part of a larger programme [1,2] of metallurgical investigations of ancient Indian metallic objects and artifacts jointly conducted by the Archaeological Laboratories of the Department of Ancient Indian History, Culture and Archaeology and the Department of Metallurgical Engineering, both of the Banaras Hindu University.

The archaeological details of these coins are given in Table I below and the photographs of the obverse and reverse sides are illustrated. (**Pl. IV. 7-10**).

TABLE—I

Sr. No.	Reg. No.	Weight of coins in gms.	Archaeological details
1	330	8.9677	Skanda Gupta, 455-467 A.D. Archer type.
2	131	7,7504	Chandra Gupta, 375-414 A.D. Archer type.
3	132	7.7834	—do—
4	133	7.7204	Kumāra Gupta, 414-455 A.D. Archer type.

Experimental Procedures :

Determination of Specific Gravity :—On account of the great antiquarian value and archaeological importance of the gold coins we were not allowed to sample these coins for chemical analysis. All that we could do was to qualitatively test the alloying elements present and then determine the percentage of gold and alloying element (silver was found to be the only significant alloying element) by measurement of specific gravity. The specific gravity was measured by the well known method of Archimedes. Special attention was paid to avoid any air bubbles adhering to the coin when weighed in water, care was also taken to avoid adherence of surface film of water to the suspension wire. A thin silver wire was used.

1. H. C. Bhardwaj and S. Misra, *JNSI*, Vol. XXX (1968) Technical Section, Dr. Richard Bertram Whitehead Commemoration, Vol., pp. 241-251.
2. H. C. Bhardwaj and S. Misra, *JNSI*, Vol. XXXI (1969) pp. 194-204.

The percentage of gold was calculated by the following relationship and silver being the only other constituents was found by difference.

$$\% \, Au = \frac{D_a \cdot D_x - D_a \cdot D_b}{D_a \cdot D_x - D_b \cdot D_x} \times 100$$

where, D_a is sp. gr. of gold,

D_b is sp. gr. of silver,

and D_x is the sp. gr. of coin.

Metallographic Examination :—The coin was embeded in low melting Wood's alloy of melting point of 77°C. The edge of the coin was prepared for metallographic examination. Special care was taken to grind and polish the minutest part of the coin. It was ground successively over finer grades of emery paper and finally polished over sylvet cloth using silvo.

Etching :—Initially the coin was attempted to be etched with cold and hot aqua regia without much success. It was inferred that due to the presence of sizeable amount of silver and consequent precipitation of silver chloride the etching is not successful. Subsequently the coin was etched with Wise-Jewett reagent (Mixture of equal volumes of 10% aquous solution of Ammonium persulphate and 10% Potassium cyanide). This reagent gave better results though it has a short life[1].

Measrement of Micro-Hardness :—The coin was indented under diamond pyramid indenter using a load of 20 gms by means of a Vicker's Micro-Hardness apparatus (TMT, Russian). The indentation diagonals were measured by means of a micrometer and an average of five indentation were taken.

Results :

Macro-Examination :—The coins show excellent details of embossing on both sides indicating that striking technique was well developed. However, the die alignment was not properly manipulated. This has resulted in the eccentricity of the striking on the reverse side. Both the sides show fine elongated cavaties on the surface.

1. E. M. Wise, '*Gold*', Van Nostrad, 1964, p. 360.

Chemical Composition :—The result of chemical composition as obtained by means of qualitative testing and specific gravity measurement are given in Table II.

TABLE—II

Sr. No.	Regd. No.	Sp. gr. gm/cm³	Wt.% Gold	Wt.% Silver*
1	130	16.001	75	25
2	131	15.804	74	26
3	132	16 250	77.5	22.5
4	133	51.807	74	26

* **Iron is present in traces.**

Micro-Enamixation :—Pl V. 1 & 2 show the micro-structure of the coin edge as revealed by two different etchants, hot aqua regia (**Pl. V. 1**) and Wise-Jewett reagent (**Pl. V. 2**). Both of them show equiaxed fine grains of size approximately 0.002 cm. The fine parallel cratches could not be avoided in the metallographic preparation due to the dire necessity to minimise the grinding and polishing operation with a view to avoiding the coin getting worn out.

Pl. V. 1. shows a typical crack originating from a pit and Pl.V. 2. similarly shows a few of the typical pits which are more profound towards the periphery and are parallel to the flat surface of the coin.

Micro-Hardness Measurement:—It shows a value of 160 kgm/mm² which is unusually large for a gold coin. This further confirms that the coin has been hardened due to the alloying with silver. The composition of the coin (75 wt. percent gold and 25 wt. percent silver) corresponds approximately to the composition which undergoes an ordering transformation resulting in age hardening[1].

This composition also maintains some of the favourable mechanical properties of pure gold namely a low annealing temperature, high ductility (elongation of about 40-50 %) and extremely easy working characteristics. Fluidity is good in this range and alloys in this range have good castability.

1. R. Smoluchowski, '*Phase Transformations in Solid*' Wiley, p. 370 (1951).

There is one disadvantage in the molten gold alloys with increasing silver content namely solubility of oxygen increases in this alloy, resulting in the porosity of the solid alloy. Some of the cavities and pits may be of this origin.

Traces of iron detected may have been due to the usual contamination in the parent gold. This has incidently a desirable property of inhibiting grain growth and is consistent with the fine grain size (**Pl. V. 1 & 2**).

Fabrication Technique :—From the available evidence of macro and micro-structures it may be concluded that the material has been either hot worked or cold worked followed by annealing above the recrystallization temperature as is clear from fine equiaxed grains.

Dies of steel or even bronze could have been sufficient to emboss the coin blanks.

On the basis of the recovery of a clay mould of archer type of Chandra Gupta II from the Rajghat excavations, there could be the possibility of the Gupta period gold coins having been cast in the clay mould; but considering the small size of grains, absence of dendrites and the fine embossing. We are inclined to believe that these were die struck rather than cast. As the mould in question is not from a stratified dig we cannot attach much impottance to it and no wonder if it represents a forger's mould prepared from the genuine gold coin.

Acknowledgements. The authors are thankful to Dr. K. K. Sinha, Head of the department A.I.H.C. & Archaeology and Prof. T. R. Ananthraman, Head of the Metallurgy department both of Banaras Hindu University. Thanks are also due to Sri K. D. Mishra of Archaeological laboratory for assistance in the work.

REVIEW

Richard J. Trowbridge : Crown of the British Empire, pp. 170, Second Edition, published by Krause Publications, Iloha, Wisconsin, (U. S. A.), 1971.

This is the second edition of the book which incoporated the strenuous efforts of the author who, this time, tried to remove the uneasiness coming in the way of the turning over its pages by the coin-collectors.

The work extends over the period ranging from the minting of the first British crown down to the present. Crown struck in the name of the member states of the British Empire are also included. In 1959, the first crown was minted by the hand in the hammered style. Since 1954, attempts were made in the direction of producing the machine made coins but its final shape formulated on May 17, 1662 when the government ordinanced to manufacture all the future coinage by the milled process.

The crowns are catalogued in order of the reigning dates of the issuers. A chapter is devoted to each monarch and all his crowns are grouped in that. A short history of the sovereign and the events are also documented.

All the listed crowns are completely described and illustrated. Their dates, mint-marks and other features are also recorded. To the listings are added their valuations with their conditions graded. The mintage figures, where available, are given and short notes in regards to their avability are appended.

The printing and the illustrations are commendable. The popularity and appreciation of this text is itself proved by its second edition brought out just the next year of the publication of its first edition 1970.

Nisar Ahmad

OBITUARY

Dr. Raj Bali Pandey

(1907-1971)

The Indological scholarship has suffered an irreparable loss in sudden, sad demise of Dr. Raj Bali Pandey, Vice-Chancellor, University of Jabalpur, on June 6, 1971, at Jabalpur, at the age of 64.

Born on May 7, 1907, at Karauni in the Deoria District, U. P., Dr. Pandey had a brilliant academic career and had all his higher education at the Banaras Hindu University. He passed his B. A. (Hons) examination with Honours in Sanskrit in 1931 standing first in order of merit, and took his Master's degree in Ancient Indian History and Culture two years later, also in the first class. In 1936, he was awarded the D. Litt. degree for his thesis entitled *A Socio-Religious Study of the Hindu Saṁskāras* which evoked high praise from the board of his examiners comprising such doyens in the field of Indological studies as A. B. Keith, Ganganath Jha and P. V. Kane and was later published under the title *Hindu Saṁskāras*.

After taking his doctorate, Dr. Pandey joined, in 1936, the Department of Ancient Indian History and Culture, Banaras Hindu University, as Assistant Professor and in 1952 rose to the coveted position of Manindrachandra Nandi Professor and Head of the Department of Ancient Indian History and Culture and Principal of the College of Indology which he continued to adorn up to 1960. In 1961, he was invited to join the still-born University of Jabalpur as Malaviya Professor of Ancient Indian History and Culture which position he held with dignity till 1968 when he was appointed Vice-Chancellor of the University. His dedication to study and teaching was so great that even after taking over as Vice-Chancellor he found time to do regular teaching and guiding Ph. D. students and spared no pains to complete the works undertaken by him earlier.

During his long academic career covering about thirty-five years he was associated with a large number of academic and literary organisations and took particular interest in the promotion of Hindi language and literature. He was General Secretary of the Kashi Nagari Pracharini Sabha from 1953 to 1961 and during this period organised the preparation and publication, among others, of the *Hindī Viśvakośa, Hindī Sāhitya kā Bṛihat Itihāsa* (Comprehensive History of Hindi Literature), *Vidhi Patrikā* (Law Journal), *Hindi Review*, etc. He was also connected with the Hindī Sāhitya Sammelan and the Bhāratīya Hindi Parishad. He also served as a member on the various committees of a large number of universities.

In recognition of his contributions to the advancement of Indological scholarship he was honoured by a number of all--India organisations. In 1943, he was Secretary of the Archaeology Section of the All-India Oriental Conference and in 1955 presided over the Ancient India section of the Indian History Congress. He was also Chairman of the Numismatic Society of India for a couple of years after the late Dr. A. S. Altekar's death.

Dr. Pandey's was a life devoted to a ceaseless pursuit of Indological studies and he had a large number of works in English and Hindi to his credit the more important of which are as follows.

(1). *Hindū Saṁskāras*,

(2) *Vikramāditya of Ujjayinī*,

(3) *Indian Palaeography*, Vol. I,

(4) *Chandragupta Dvitīya Vikramāditya* (Hindi),

(5) *Purāṇa-vishay-ānukramaṇikā*, Vol. I (Hindi)

(6) *Aśoka ke Abhilekha* (A Corpus of Asokan Inscriptions),

(7) *Bhāratīya Nīti kā Vikāsa* (Evolution of Hindu Ethics),

(8) *Prāchīna Bhārata* (History of Ancient India),

(9) *Gorakhapura Janapada kī Kshatriya Jātiyoṁ kā Itihāsa* (History of the Tribes of the Gorakhpur region),

(10) *Hindū Dharmakośa* (A Dictionary of Hinduism in Hindi, under publication by Motilal Banarsidass).

He also contributed two chapters each for the *Cambridge History of India.* Vol. II and *Comprehensive History of India.* Vol IV, which are in press, and a large number of entries for the *Hindī Viśvakośa*. He edited the first volume of the *Hindī Sāhitya kā Bṛihat Itihāsa* a substantial portion where of was his own contribution. Besides, a large number of his research papers in Hindi and English are scattered in numerous reputed journals and other occasional publications. Some of the works undertaken by him remain incomplete owing to his sudden passing away.

Dr. Pandey was a model of scholarship and an ideal teacher whose example others would do well to emulate. He took keen personal interest in the mental, moral and material well-being of his students both during their studentship and in their later career and consequently enjoyed their spontaneous love and affection in an immense measure. He was very informal with his students and often went to the extent of helping them by taking his own purse. In short, he treated students as members of his own family. The undersigned, who is privileged to have been one of his most beloved students, still recollects his student days when Dr. Pandey, though Manindrachandra Nandi Professor and Principal of the College of Indology and Chief Warden of three University hostels, would, in course of his morning walk-cum-hostel-inspection, often come to his room and enquire about his well-being. In his personal life he was a living model of Indian culture, most humble and hospitable even to his juniors and former students. May his soul rest in eternal peace.

Ajay Mitra Shastri

ERRATA

JNSI, XXXII, Part II

Page 214 Read طواس for طوال

Page 214 Read بهادر for هادر

JNSI, XXXIII, Part 1

Page 6, Line 11—Read, Curtius (IV, 15, 21): for, Herodotus

Page 120, Line 3—Read, the levels : for, a levels

Page 120, Line 27—Read, her left : for, his left

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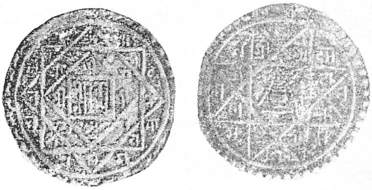
3



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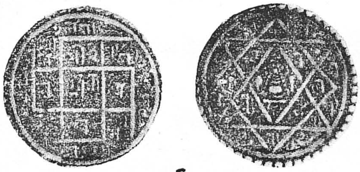

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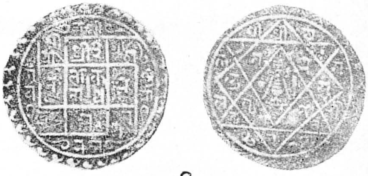

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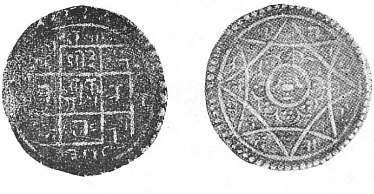

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1. Eye copy of the Coin of Tagara ;
2-10. Nepal Coins

PLATE II

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Nepal Coins

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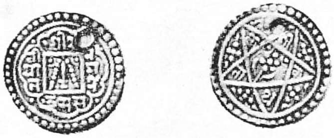
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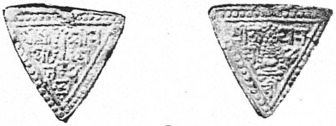
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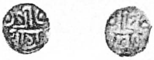
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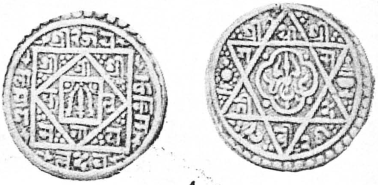
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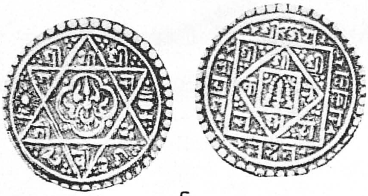
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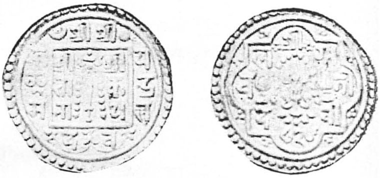
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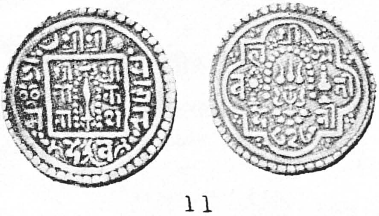
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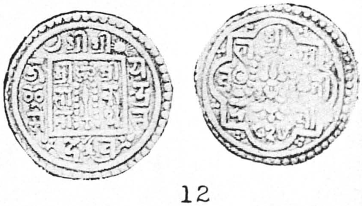
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Nepal Coins

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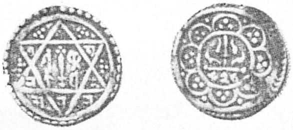

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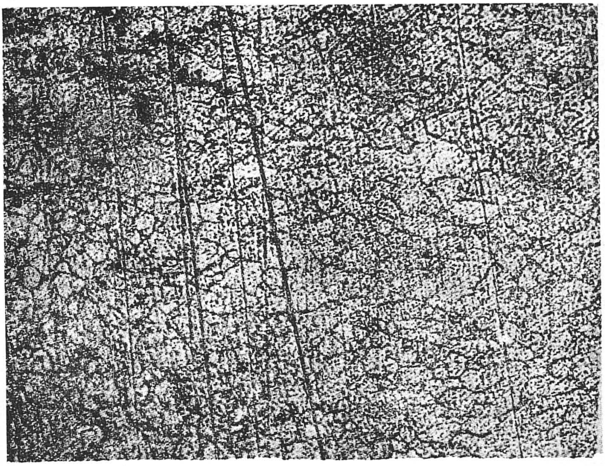
1-6. Nepal Coins
7-10. Gupta Gold Coins



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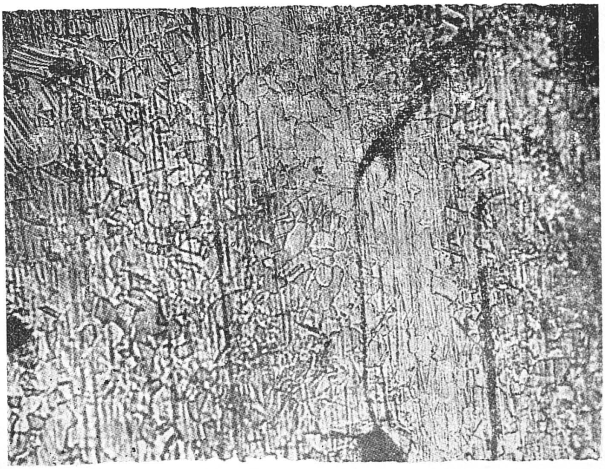

2

1. Photomicrograph of the gold coin.
   Etched by Wise--Jewett reagent × 200
2. Photomicrograph of the gold coin.
   Etched by hot aqua regia × 200

THE
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OF
INDIA

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ऋ ṛi ; ङ् ṅ ; च् ch, छ् chh, ञ् ñ, ण् ṇ, श् ś, ष् sh.

; ḍ ڈ ; d د ; kh خ ; ḥ ح ; ch چ ; j ج ; th ث ; ṭ ٹ ; t ت ; p پ ; b ب ; a ا
; a' ع ; ظ ; ṭ ط ; ẓ ض ; ṣ ص ; sh ش ; s س ; zh ژ ; z ز ; ṛ ڑ ; r ر ; z ذ
.y ی ; h ه ; w و ; n ن ; m م ; l ل ; g گ ; k ک ; q ق ; f ف ; gh غ

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